THE REVIEW OF APPLIED ENTOMOLOGY.

SERIES A: AGRICULTURAL.

SUBJECT INDEX

TO

VOLS. I—III.

COMPILED BY

S. A. NEAVE, M.A., B.Sc. (Oxon.).

LONDON:

PUBLISHED BY

THE IMPERIAL BUREAU OF ENTOMOLOGY,
89, QUEEN'S GATE, LONDON, S.W. 7.

1917.

Price 5/- net.

All Rights Reserved.

IMPERIAL BUREAU OF ENTOMOLOGY.

Honorary Committee of Management.

VISCOUNT HARCOURT, *Chairman.*

Lieutenant-Colonel A. W. Alcock, C.I.E., F.R.S., London School of Tropical Medicine.

Mr. E. E. Austen, Entomological Department, British Museum (Natural History).

Dr. A. G. Bagshawe, C.M.G., Director, Tropical Diseases Bureau.

Mr. E. C. Blech, C.M.G., Foreign Office.

Sir J. Rose Bradford, K.C.M.G., F.R.S., Secretary, Royal Society.

Surgeon-General Sir David Bruce, C.B., F.R.S., A.M.S.

Mr. J. C. F. Fryer, Entomologist to the Board of Agriculture and Fisheries.

Dr. S. F. Harmer, F.R.S., Keeper of Zoology, British Museum (Natural History).

Professor H. Maxwell Lefroy, Imperial College of Science and Technology.

The Hon. Sir John McCall, M.D., Agent-General for Tasmania.

Dr. R. Stewart MacDougall, Lecturer on Agricultural Entomology, Edinburgh University.

Sir John McFadyean, Principal, Royal Veterinary College, Camden Town.

Sir Patrick Manson, G.C.M.G., F.R.S., Late Medical Adviser to the Colonial Office.

Sir Daniel Morris, K.C.M.G., Late Adviser to the Colonial Office in Tropical Agriculture.

Professor R. Newstead, F.R.S., Dutton Memorial Professor of Medical Entomology, Liverpool University.

Professor G. H. F. Nuttall, F.R.S., Quick Professor of Protozoology, Cambridge.

Professor E. B. Poulton, F.R.S., Hope Professor of Zoology, Oxford.

Lieutenant-Colonel Sir David Prain, C.I.E., C.M.G., F.R.S., Director, Royal Botanic Gardens, Kew.

Mr. H. J. Read, C.B., C.M.G., Colonial Office.

The Honourable N. C. Rothschild.

Mr. Hugh Scott, Curator in Entomology, Museum of Zoology, Cambridge.

Dr. A. E. Shipley, F.R.S., Master of Christ's College, Cambridge.

Sir Stewart Stockman, Chief Veterinary Officer, Board of Agriculture.

Mr. F. V. Theobald, Vice-Principal, South Eastern Agricultural College, Wye.

Mr. C. Warburton, Zoologist to the Royal Agricultural Society of England.

The Chief Entomologist in each of the Self-governing Dominions is an *ex officio* member of the Committee.

General Secretary.

Mr. A. C. C. Parkinson (Colonial Office).

Director and Editor.

Dr. Guy A. K. Marshall.

Assistant Director.

Mr. S. A. Neave.

Head Office.—British Museum (Natural History), Cromwell Road, London, S.W.7.

Publication Office.—89, Queen's Gate, London, S.W.7.

Digitized by the Internet Archive
in 2025

https://archive.org/details/review-of-agricultural-entomology_1917_1-3_index

SUBJECT INDEX.

In the case of scientific names the page reference is cited only under the heading of the generic name.

Plants and fungi are indexed under their generic names only.

When a generic name is printed in brackets, it signifies that the name is not adopted.

A.

Aaron's Rod (see *Verbascum thapsus*).
Abax striola, II. **326.**
Abbella (*Brachistella*) *acuminata*, parasite of *Draeculacephala mollipes* in U.S.A., III. **577.**
Abbella auriscutellum, parasite of *Draeculacephala mollipes* in U.S.A., III. **577.**
Abbella (*Brachistella*) *prima*, parasite of sugar-cane leaf-hopper in Porto Rico, III. **26.**
Abbella subflava, parasite of Jassids and *Blissus leucoptera* in U.S.A. and Australia. III. **565.**
abbreviatus, *Cryptohypnus*; *Diaprepes*.
Abchaz Apple, not attacked by *Eriosoma* (*Schizoneura*) *lanigerum* in Russia, II. **515.**
abdominalis, *Coccinella*; *Macrocentrus*; *Olla*.
aberrans, *Pyrilla*.
abiens, *Agromyza*.
Abies, *Chermes* spp. on, I. **387**; II. **14.**
Abies amabilis, *Megastigmus* spp. in seeds of, I. **297.**
Abies balsamea, Aphids on, in Maine, I. **141**; *Chermes pectinatae* on, III. **596**; not attacked by gipsy moth in U.S.A., III. **669.**
Abies concolor (American Silver Fir), *Megastigmus* spp. in seeds of, I. **297**; pests of, in Russia, III. **224.**
Abies grandis, *Megastigmus* in seeds of, I. **297.**
Abies lasiocarpa, *Megastigmus lasiocarpae* in seeds of, I. **297.**
Abies magnifica, *Megastigmus* in seeds of, I. **297.**
Abies mariesi, *Megastigmus borriesi* in seeds of, I. **297.**
Abies nobilis, *Megastigmus pinus* in seeds of, I. **297.**
Abies nobilis var. *glauca*, *Chermes piceae* on, III. **597.**
Abies orientalis, *Cryphalus piceae* on, in Baden, II. **501.**
Abies pectinata (Silver Fir), pests of, in Russia, II. **220, 516**, III. **223**; *Chermes* spp. on, I. **387**, III. **343, 594–597**; *Cryphalus abietis* on, in Scotland, III. **406**; *Mindarus abietinus* on, in Germany, II. **124.**
Abies sibirica, *Chermes pectinatae* on, III. **596.**
abietella, *Dioryctria* (*Phycis*).
abieticolens, *Chermes*.
abietina, *Aphis*.
abietinus, *Mindarus*.
abietis, *Aspidiotus*; *Chermes*; *Cryphalus*; *Ernobius*; *Hylobius*; *Lachnus*; *Lophyrus*.
abietis-piceae, *Chermes*.
abietum, *Nematus* (see *Lygaeonematus pini*).
abilis, *Zeteticontus*.
abjectus, *Praon*.
Ablabera hottentota, on buchu plants in S. Africa, II. **299.**
Ablerus clisiocampae, parasite of *Aspidiotus perniciosus*, II. **165.**
ablutella, *Anerastia*.
abnormis, *Paraleptomastix*.
Abor, new species of *Xyleborus* and Termites from, II. **688.**
Abraxas grossulariata (Currant Moth, Magpie Moth), control of, in Holland, III. **644**; in Britain, III. **74, 715**; on bush fruits in Baden, II. **500**; on currants in Russia, III. **221, 225, 393**; on gooseberry in France, II. **621, 622**; parasites of, II. **622**, III. **639.**

(C308) Wt. 1597/125. 1,000. 7.17. B.&F.Ltd. G.11/4.

abruptalis, Syngamia.
abscissor, Bracon.
Abutilon, Anomis (*Cosmophila*) *erosa* on, in Virginia, II. **140.**
Abutilon avicennae, Chloridea obsoleta on, in U.S.A., III. **470.**
Abutilon Moth (see *Anomis erosa*).
Abyssinia, *Apate monacha* in, II. **196.**
abyssinica, Evania.
Acacia, pests of, in Australia, III. **80, 490, 548, 652**; pests of, in Eritrea, II. **346**, III. **433**; pests of, in France, I. **172, 472**, II. **196**, III. **10**; pests of, in U.S.A., II. **390, 438**, III. **85, 462**; *Chalioides junodi* on, in S. Africa, I. **303**; *Cyllene robiniae* on, in Canada, III. **43**; *Eulecanium robiniarum* on, in Russia, III. **42, 225, 399**; not attacked by *Sciaphobus squalidus* in Russia, II. **337**; prohibition against importation of, into S. Rhodesia, II. **163**; *Vanessa polychloros* on, in Barbary, III. **427**; (see also Wattle).
Acacia arabica, Oxyrhachys tarandus on, in India, II. **242**; pests of, in Egypt, II. **321, 505**; scale-insects on, in India, II. **139.**
Acacia berlandieri, Oncideres putator on, in U.S.A., III. **475.**
Acacia calamifolia, Lecaniodiaspis acaciae on, in Australia, III. **751.**
Acacia cambagei, scale-insects on, in Australia, II. **427, 428.**
Acacia catechu, Oxyrhachys tarandus on, in India, II. **242.**
Acacia catechuoides, Pseudococcus filamentosus on, in E. Africa, II. **146.**
Acacia decurrens, pests of, in Ceylon, II. **644**, III. **83, 123**; (see *Wattle*).
Acacia edgworthi, Virachola livia on, in Aden, II. **321.**
Acacia farnesiana, Oncideres putator on, in U.S.A., III. **475.**
Acacia koa, bees boring in, in Hawaii, III. **682.**
Acacia melanoxylon, Icerya purchasi on, in Portugal, I. **354.**
Acacia mollissima (Silver Wattle), *Chalioides junodi* on, in S. Africa, I. **303**; (see *Wattle*).
Acacia pendula, Rhizococcus lobulatus, sp. n., on, in Australia, III. **548.**
Acacia pennata, Lophococcus vuilleti, sp. n., on, in W. Africa, II. **410.**
Acacia siamea, Oxyrhachys tarandus on, in India, II. **242.**
acaciae, Fiorinia; *Lecaniodiaspis.*
Acadian Flycatcher (see *Empidonax virescens*).
Acaena ovina, Haltica pagana on, in Australia, I. **514.**
Acaena sanguisorbae, Haltica pagana on, in Australia, I. **514.**
acagutlae. Eutermes.
Acalla schalleriana (see *Oxygrapha*).
acalypha, Miranda.
Acalypha (Royal Palm), *Icerya aegyptiaca* on, in East Africa, II. **429**; *Pseudaonidia oreodoxae*, sp. n., on, in Ceylon, III. **168.**
Acamatus schmitti (see *Eciton*).
acanthochermes, Phylloxera.
Acanthocinus aedilis, in Russia, III. **398.**
Acanthocoris fasciculatus, on *Solanum melongena* in Zanzibar, III. **125.**
Acanthoderes varius, on poplar in Astrachan, III. **221.**
Acantholepis, attracted by fungus associated with *Aphis sorghi*, II. **631.**
Acanthomyops interjectus (see *Lasius*).
Acanthopsyche bipars (see *Oeceticoides*).
Acanthopsyche reidi (Limpet Caterpillar), on tea in India, III. **489.**
Acanthoscelides obtectus (see *Bruchus*).
Acanthosoma haemorrhoidale, on apples in Ireland, II. **8.**
Acanthotermes militaris, on rubber, in E. Africa, I. **476.**
acarivora, Cecidomyia (*Diplosis*).
Acaroina Solution, against *Aulacaspis pentagona*, II. **163, 207.**
Acaroletes pseudococci, sp. n., parasite of *Pseudococcus citri* in Sicily, II. **253.**
Acarus telarius (see *Tetranychus*).
Acaulona peruviana, sp. n., parasite of *Dysdercus ruficollis* in Peru, I. **172.**
accentifer, Acrocinus.
accepta, Nacoleia (*Omiodes*).
accius, Lorema.
Acer acuminatum, in the Crimea, III. **544.**
Acer campestre (Field Maple), *Clysia ambiguella* on, in Russia, III. **210.**
Acer marginata aurea, Exomias pellucidus on, in Britain, III. **564.**
Acer rubrum, Agromyza sp. on, in U.S.A., II. **307**; resistant to gipsy moth, II. **711.**
Acer saccharinum (Silver Maple), pests of, in Canada and U.S.A., I. **3, 277**, II. **134, 184, 390, 711**, III. **86, 473, 566**; *Saissetia nigra* on, in St. Vincent, III. **411.**
acericola, Phenacoccus; *Pulvinaria.*
acerifolii, Drepanaphis; *Pemphigus.*
acerinum, Rhytisma.

aceris, *Acronycta*; *Aleurochiton*; *Pemphigus*; *Phenacoccus*; *Pseudococcus*.
acerni, *Aegeria* (*Sesia*).
Acetate of Lead (see Lead Acetate).
Acetate of Nicotine, experiments with, as an insecticide, II. 50.
Acetic Acid, as an insecticide, III. 284.
Acetone, ineffective as an insecticide, III. 285.
Acetylene, against ants, II. 624; against *Eriosoma lanigerum*, II. 177.
Acetylene gas refuse, as an insecticide, I. 191, II. 18, 19.
Acetylene lamps, for attracting insects, I. 8, III. 751.
Achaea janata (*melicerta*), on castor, etc., in India, II. 139, III. 145.
Achaea (*Ophiusa*) *lienardi*, in South-East Africa, I. 473.
achemon, *Pholus*.
Acherontia, on tobacco in Sumatra, I. 14.
Acherontia atropos, on olive trees and potatoes in Portugal, I. 313; on potatoes in Brazil, II. 173.
Acherontia lachesis, on tobacco in the Far East, II. 490.
Acherontia styx, on tobacco in the Far East, II. 490.
Acheta morio, on sisal in E. Africa, II. 128.
Achillea millefolium (Yarrow), *Aphis helichrysi* on, in England, III. 633; *Hoplia pubescens* on, in California, II. 708.
Achorutes armatus, on beans in Ireland, II. 656.
Achras sapota (see Sapodilla Plum).
Achroia grisella (Lesser Bee Moth), in Britain, II. 564; in Canada, I. 403; in New Zealand, I. 343; in Pennsylvania, I. 275.
Achrysocharis formosa var. *erythraea*, n., parasite of *Dacus oleae* in Eritrea, III. 173.
Achrysocharis formosa var. *meridionalis*, n., parasite of *Dacus oleae* in Cape Colony, III. 432.
Acidia (*Trypeta*) *cognata*, on Jerusalem artichoke, III. 33.
Acidia heraclei (Celery Fly), bionomics of, in France, I. 505, II. 420, III. 188; on celery in Britain, II. 627, III. 627, 660; on Jerusalem artichokes, III. 33; on celery in Italy, III. 124; parasites of, in Britain, III. 627.
Aciphylla, *Pseudococcus eockaynei* on, in New Zealand, III. 721.
Aclees birmanus, on *Ficus* and *Artocarpus* in Java, II. 534, 535.
Acleris, parasitised by *Camposcopus aclerivora*, sp. n., in U.S.A., III. 658.
aclerivora, *Camposcopus*.
Acmaeodera culta, on blackberry in N. Carolina, I. 161.
Acocephalus rusticus, on lucerne in Russia, II. 44, 262.
Acocephalus striatus, in Maine, III. 530.
Acontia graellsii, on cotton in Nyasaland, II. 277.
Acontia luctuosa, parasitised by *Trichogramma* in Russia, III. 641.
Acraea terpsichore, on sweet potatoes in Uganda, I. 49.
Acraea (*Pareba*) *vesta*, on coffee in the Far East, II. 490.
acraea, *Estigmene*.
Acrida turrita, on tobacco in Nyasaland, II. 277.
acridiorum, *Coccobacillus*.
Acridium aegyptium (see *Orthacanthacris*).
Acridium melanocorne (see *Cyrtacanthacris*).
Acridium peregrinum (see *Schistocerca*).
Acridium purpuriferum (see *Cyrtacanthacris septemfasciata*).
Acridium rubellum (see *Cyrtacanthacris*).
Acridium septemfasciatum (see *Cyrtacanthacris*).
Acridotheres tristis, introduced into Réunion from the Philippines, II. 216.
Acrobasis, on walnut in Connecticut, I. 52, 70.
Acrobasis caryae (Walnut Bud Moth), I. 70; on walnuts, in U.S.A., I. 181.
Acrobasis indiginella (see *Mineola*).
acrobasis, *Secodella*.
Acrobat Ant (see *Cremastogaster*).
acrobates, *Telenomus*.
Acrocercops, on camphor in Ceylon, II. 597.
Acrocercops bifasciata, on cotton in Nigeria, III. 164.
Acrocercops (*Zarathra*) *cramerella* (Cacao Moth), bionomics of, in Java, I. 3, III. 311, 313, 662; parasites of, I. 56, III. 311, 313.
Acrocercops ordinatella (Camphor Leaf-miner), parasitised by *Sympiesis purpureus* in Ceylon, III. 443.
Acrocercops strigifinitella, on chestnuts in U.S.A., III. 415.
Acrocinus accentifer, on citrus in Brazil, II. 173, 174.
Acrocomia lasiospatha (Gru-gru Palm), *Rhynchophorus palmarum* on, in Barbados, II. 143.

Acrocomia sclerocarpa (Gru-gru Palm), *Schistocerca paranensis* on, in Trinidad, III. 679.
Acrolepia assectella, II. 542; on onions and garlic in Russia, III. 104, 544, 641.
Acrolepia betulella, on leeks and onions in Holland, I. 386; on leeks in Russia, III. 104.
Acronycta, on fruit trees in U.S.A., II. 132.
Acronycta aceris, in Russia, III. 403.
Acronycta clarescens, parasitised by *Sphaeropyx bicolor* in U.S.A., II. 132.
Acronycta psi, control of, in Russia, II. 258, III. 204, 221, 403; on chestnuts in Portugal, I. 313.
Acronycta rumicis (Bramble Moth), control of, on beet, etc., in Russia, I. 499, II. 258, 313, III. 46, 403, 542; on hops in Britain, II. 564, III. 660.
Acronycta rumicis var. *turonica*, parasitised by *Anilasta* sp. in Russia, II. 313.
Acronycta tridens, Hymenopterous parasites of, III. 401; in orchards in Russia, I. 497, II. 44, III. 41, 204, 221.
Acropteron rufipes, on bamboo in Brazil, III. 306.
Acrostalagmus, infesting *Sipha graminis* in Porto Rico, II. 49.
Acrostalagmus albus, infesting Aphids and Coccinellids in Porto Rico, III. 476, 674.
Actinidia, food-plant of *Aspidiotus perniciosus*, II. 390.
Actinoti a polyodon, in Russia, III. 639.
Actinomus apis, causing foul-brood in bees, II. 678.
Actinomycosis, in bees, I. 443.
aculeata, Mordella.
aculeatus, Haplothrips (*Anthothrips*); *Megastigmus.*
acuminata, Abbella (*Brachistella*); *Aelia.*
acuminatus, Aegus (*Odontolabis*).
acuta, Hotea; *Leptocorisa.*
acutigena, Habrocytus.
acutocaudatus, Tylenchus.
acutus, Platymetopius.
Acyranthes aspera, Acrocercops on, in Ceylon, II. 597.
Acyrthosiphon caraganae, on *Caragana arborescens* in Russia, I. 461, III. 543, 702.
Acyrthosiphon cyparissiae, in Russia, III. 702.
Acyrthosiphon dubium, in Russia, III. 702.
Acyrthosiphon emelianovi, on cotton, III. 702.
Acyrthosiphon gossypii, on cotton in Russia, II. 312, III. 702.
Acyrthosiphon gossypii paczoskii, on *Lepidium perfoliatum* in Russia, III. 702.
Acyrthosiphon kamtshatkanum, III. 702.
Acyrthosiphon loti, in Russia, III. 702.
Acyrthosiphon navozovi, in Russia, III. 702.
Acrythosiphon norvegicum, III. 702.
Acyrthosiphon orientale, III. 702.
Acyrthosiphon (*Macrosiphum, Nectarophora, Siphonophora*) *pisi* (Pea Aphis), bionomics of, in North America, II. 32, 160, 189, 467, 492, III. 68, 155, 552, 763; food-plants of, in Africa, III. 749; in Denmark, III. 526, 698; on clover and peas in Britain, I. 434; on lentils, I. 123; on lucerne etc. in Russia, I. 527, II. 44, 312, 370, III. 45, 398, 401, 481, 606, 702–704.
Acyrthosiphon pisi destructor, on peas in America, III. 558, 703.
Acyrthosiphon pisi turanicum, in Turkestan, III. 703.
Acyrthosiphon pisi ussuriensis, III. 703.
Acyrthosiphon skriabini, on *Malva neglecta* in Russia, III. 702.
Acyrthosiphon vassilievi, sp. n., on pumpkins in Turkestan, III. 702.
Acythopeus (*Baridius*) *aterrimus*, imported into England in orchids, I. 36.
Adalia (*Coccinella*) *bipunctata*, attacking *Aphis abietina* in Britain, II. 619; bionomics of, in Russia, I. 208, II. 80; bionomics of, in U.S.A., I. 242, 511, II. 131, III. 132, 142, 473, 760; destroying Aphids in Russia, III. 45, 206, 220; not controlling *Kakothrips robustus*, III. 280; on pines in England, II. 497.
Adalia bipunctata var. *humeralis*, destroying Aphids in U.S.A., III. 142.
Adalia flavomaculata, destroying *Toxoptera graminum* in S. Africa, II. 154.
Adalia melanopleura, destroying Aphids in U.S.A., III. 142.
Adalia obliterata, destroying *Lachnus pinicola* in Britain, I. 120.
Adalia undecim-notata (see *Coccinella*).
Adansonia digitata, scale-insects on, in E. Africa, II. 146, 429.
adara, Laelia.
Adelencyrtus odonaspidis, imported into Hawaii against scale-insects, III. 757.

Adelges (see *Chermes*).
Adelocera, habits of, in U.S.A., III. 299.
Adelphocoris annulicornis, in Russia, III. 727.
Adelphocoris (*Capsus*) *lineolatus*, bionomics of, in Russia, I. 527, II. 44, 313, 425, 668, III. 7, 41, 45, 93, 479, 542, 601; food-plants of, in Britain, III. 747.
Adelphocoris rapidus, spreading *Bacillus amylovorus* in U.S.A., III. 465.
Adelphocoris seticornis, on lucerne in Russia, III. 45.
Adelura apii, parasite of *Acidia heraclei* in Britain, III. 627.
Aden, *Virachola livia* on *Acacia edgworthi* at, II. 321.
Adenanthera, not attacked by *Pseudococcus filamentosus* in E. Africa, II. 146.
Adenostoma fasciculatum, *Eriococcus adenostomae* on, in California, II. 553.
adenostomae, *Eriococcus*.
Adesmia, destroying egg-clusters of locusts in Turkestan, II. 509.
Adhesite, against *Technomyrmex albipes*, I. 474.
Adhesives, in sprays, I. 46, 132, 191, 238, 252, 295, 300, 538, 547, 548, II. 90, 110, 123, 180, 236, 274, 282, 339, 374, 416, 556, 580, 588, 620, 649, 681, III. 79, 193, 212, 254, 282, 295, 347, 456, 490, 512, 523, 659, 692; (see Molasses and Soap).
Adia genitalis (see *Chortophila*).
Adiantum, *Chionaspis dubia* on, in Fiji, III. 548.
Adimonia capreae (see *Galeruca*).
Adimonia suturalis (see *Lochmaea*).
adjecta, *Aphis*.
Admontia amica, parasite of Tipulid, III. 466.
Adonia variegata (see *Coccinella*).
adonidis, *Entomoscelis*.
adonidum, *Pseudococcus*.
Adoretus, experiments with *Elis sexcincta* and, in Hawaii, III. 681.
Adoretus compressus, in Mauritius, I. 30.
Adoretus hirtellus (Cacao Leaf Beetle), on cacao in the Gold Coast, II. 141, 671; on cacao and kola in Nigeria, II. 107, 108, III. 165; on cacao in Uganda, I. 49, II. 59, 592, III. 663, 752; remedies against, II. 59, 107, 141.
Adoretus nigrifrons, in Russia, II. 47.
Adoretus pagensteckeri, on coffee in B. E. Africa, II. 570,
Adoretus picticollis, in Rhodesia, III. 174.
Adoretus punctipennis, on coffee in B. E. Africa, II. 570.
Adoretus tenuimaculatus, in Hawaii, III. 411.
Adoretus testaceus, in Rhodesia, III. 174.
Adoretus umbrosus, captured in traps for *Ceratitis capitata*, III. 568.
Adoretus versutus (*vestitus*), plants attacked by, in Mauritius, I. 30, II. 612, III. 731; on cacao in Samoa, II. 267, 555.
Adoxophyes (*Capua*) *reticulana*, parasites of, on fruit trees in Russia, I. 489.
Adoxus obscurus (Californian Grape-fruit Worm), on *Saxifraga peltata* in California, I. 418, III. 16; on vines in Italy, III. 112.
Adoxus obscurus var. *vitis*, on vines in France, II. 608; control of, in Italy, III. 33, 658; on vines in Germany, II. 211; on vines in Russia, II. 43, 44, 45, III. 46, 658.
Adrama determinata, in tea seed in Java, III. 434.
adspersa, *Ceroplesis*; *Hypera*; *Polyphylla*.
adumbrata, *Eriocampa* (see *Eriocampoides limacina*); *Selandria* (see *E. limacina*).
adumbratus, *Xyleborus*.
adusta, *Moecha*.
advena, *Cathartus*; *Polia*.
aedificator, *Coptops*.
aedilis, *Acanthocinus*.
aedon, *Troglodytes*.
Aegeria (*Sanninoidea*), destroyed by *Spilogale interruptans*, II. 254; in British Columbia, I. 91; in Ohio, III. 90.
Aegeria acerni, on shade trees in Quebec, III. 585.
Aegeria (*Sesia*) *asiliformis*, on poplar in Italy, III. 124.
Aegeria beckii, declared a pest in British Columbia, I. 48.
Aegeria (*Sesia*) *brunneri*, sp. n., on *Pinus ponderosa* in U.S.A., III. 248.
Aegeria castaneae, on chestnut in U.S.A., I. 546.
Aegeria (*Sanninoidea*) *exitiosa* (Eastern Peach Borer), bionomics and control of, in Canada, II. 23, 431, 492, 675, 708; bionomics and control of, in U.S.A., I. 180, 283, 475, II. 120, 121, III. 180, 194, 352, 516, 529.
Aegeria myopiformis, on apples, etc., in Russia, I. 539, III. 220, 393.
Aegeria novaroensis, bionomics of, in U.S.A., III 669–671.

Aegeria opalescens (Western Peach Borer), bionomics and control of, in U.S.A., I. 85, 134, II. 439, 707, 708; in Br. Columbia, II. 675.
Aegeria pacifica (see *A. opalescens*).
Aegeria (*Synanthedon*) *pictipes* (Lesser Peach Borer), I. 546; bionomics of, in Ohio, III. 90, on fruit trees in Canada, II. 432, 492.
Aegeria (*Sesia*) *rhododendri*, on forest trees in U.S.A., III. 474.
Aegeria rutilans, bionomics of, in U.S.A., I. 132, II. 439.
Aegeria tipuliformis (Currant Borer), bionomics of, on bush fruits in Canada and U.S.A., I. 276, 405, 413, II. 492, 512, 675, 677, III. 554; on bush fruit in France, I. 68, 274, II. 421, 621; on currants etc. in Russia, II. 672, III. 129, 220, 223, 393; on gooseberry in Italy, III. 124; parasitised by *Macrocentrus marginator* in Britain, III. 92.
Aegerita, spraying with, against insect pests, III. 325.
Aegerita webberi (Brown Fungus), infesting *Aleurodes*, I. 266, 278, II. 129, III. 23, 136, 548.
aegus, Papilio.
Aegus acuminatus, on coconut in Java, III. 713.
aegyptius, Orthacanthacris (*Acridium*); *Xanthogramma* (*Syrphus*).
Aelia acuminata, on grain in Spain, I. 421; on wheat in Algeria, I. 422; on wheat in Russia, II. 33, 171, III. 6, 45, 205, 220, 342, 479, 481.
Aelia cognata, distribution of, in Europe, I. 375; on cereals in N. Africa, I. 375, II. 284, III. 387.
Aelia furcula, parasites of, I. 448, 449; on wheat in Russia, II. 716, III. 45.
Aelia germari var. *cognata* (see *A. cognata*).
Aelia rostrata, on grain in Russia, III. 45, 342, 479.
Aelia sibirica, on grain in Russia, III. 45, 479.
Aelia triticiperda, on cereals in North Africa, III. 387; probably a synonym of *A. cognata*, III. 387.
aenea, Anomala; *Chaetopsis*; *Lonchaea*; *Pomphopoea.*
aeneipennis, Xylocopa.
aeneotincta, Anomala.
aeneovirens, Rhynchites.
aenescens, Hispa; *Magdalis.*
aeneum, Melasoma (*Lina*).
aeneus, Cardiophorus; *Corymbites*; *Eumerus* (see *E. strigatus*); *Meligethes*; *Repsimus.*
Aenoplex carpocapsae, sp. n., parasite of *Cydia pomonella* in U.S.A., III. 418.
Aenoplex plesiotypus, sp. n., parasite of *Cydia pomonella* in U.S.A., III. 418.
Aeolesthes ampliata, on cotton in the Bismarck Archipelago, I. 349.
Aeolesthes holosericea, on *Shorea robusta* in India, III. 154, 722.
Aeolopus tergestinus, in Russia, III. 636.
Aeolopus thalassinus, in Russia, III. 636.
Aeolopus (*Epacromia*) *viridis*, in Russia, II. 716.
Aeolothrips albicinctus, distribution of, III. 566.
Aeolothrips fasciatus, in Russia, II. 267; destroying eggs of *Sciaphobus squalidus* in Russia, II. 338.
Aeolothrips kuwanai, on lucerne in U.S.A., III. 571.
Aeolus inscriptus, on cotton in Africa, II. 1.
aequale, Opatrum (see *Gonocephalum simplex*).
aequatus, Rhynchites.
aequinoctialis, Rhizotrogus.
aequivalens, Nephele.
aeratana, Lipoptycha.
aereus, Monodontomerus.
aeripennis, Corymbites.
aerosa, Brachys.
aeruginosus, Limonius.
Aeschna cyanea, destroying bees in Russia, III. 104.
aescularia, Anisopteryx.
aesculi, Heterothrips; *Zeuzera* (see *Z. pyrina*).
Aesculus californicus (California Buckeye), *Pemphigus fraxinidipetalae* on, II. 555; *Polycaon confertus* on, II. 599.
Aesculus hippocastanum (see Horse Chestnut).
Aesculus pavia, Heterothrips aesculi on, in Florida, III. 357.
aestivalis, Hemiteles; *Rhizotrogus.*
aestivum, Apion.
aethiopica, Cysteochila; *Decatoma*; *Euphyllura.*
aethiops, Eriocampoides.
Aëthognatus afer, parasite of *Stictococcus diversiseta* in the Gold Coast, III. 433, 434.
Aethriostoma undulata, in stored grain in India, III. 145.
Aëthusa (Fool's Parsley), *Aphis crataegi* on, II. 80.
afer, Aëthognatus; *Eupelmus.*

affinis, Aphis; *Dibrachys*; *Hoplandrothrips*; *Oides*; *Pempheres*; *Phyllotreta*; *Phytomyza*; *Psylliodes*; *Sarcophaga*; *Scoloposte-thus*; *Xyleborus*.
afflicta, Melolontha.
Afghanistan, migrations of *Dociostaurus maroccanus* in, II. 38, 72, 508.
afra, Atoposoma variegatum.
Africa, new Aphids from, II. 276, 571, III. 748; Aphids on maize and millet in, II. 273, 396, 588, 630; *Coccotrypes dactyliperda* on date palms in, I. 351; coconut pests in, II. 99; cotton pests in, II. 1; *Cylas formicarius* in, III. 461; *Epilachna similis* said to destroy *Coccus viridis* in, III. 647; fruit-fly parasites from, imported into Hawaii, III. 758; locusts and grasshoppers in, I. 138, II. 575; new Chalcids from, III. 168, 433; *Papilio demodocus* on citrus in, II. 310; pests of olive in, III. 431, 432; *Phricodus hystrix* on *Sesamum indicum* in, I. 526; scale-insects of, II. 146, 429; search for parasites of *Ceratitis capitata* in, II. 316; silkworms of, I. 33, II. 530, 547–549, 592.
Africa, East, Aphids from, I. 39, II. 276, 571, III. 748; cacao pests in, III. 663; coconut pests in, I. 393, II. 422, 445, 557, III. 32, 410; coffee pests in, I. 22, 104–108, 247, II. 446, 447; fruit-flies from, III. 748; Hymenopterous parasites in, III. 444; miscellaneous insect pests in, I. 11, 39, 149, 194, 197, 246, 247, 350, 351, 413–415, 569, 570, II. 146, 283, 446, 580; legislation against coconut pests in, III. 32, 410; cotton pests in, I. 246, II. 251, 283, 447, 579–581; rubber pests in, II. 414, 415; scale-insects of, II. 429; *Schistocerca peregrina* in, III. 503; sisal pests in, I. 414, II. 128, 146, III. 124; (see also Uganda).
Africa, French West, Coccidae of II. 410.
Africa, North, alfalfa weevil in, II. 294; pests of cereals in, II. 283, 297, III. 387, 416; locusts and grasshoppers in, II. 24; orchard pests in, I. 167, II. 419, III. 11; *Saissetia oleae* on olives in, II. 349; vine pests in, II. 196, 197; (see also Algeria and Morocco).
Africa, South, bionomics of *Agromyza fabalis* in, I. 289; Aphids from, II. 276, III. 748; *Apomecyna binubila* on pumpkins in, III. 60; *Bombycomorpha bifascia* on pepper trees in, I. 12; *Bracon celer*, sp. n., from, II. 346; *Chalcoides junodi* on wattle in, I. 303; *Coccophagus orientalis* imported from, into California, III. 738; *Colias* on lucerne in, II. 130; wilt disease of Lepidoptera in, I. 146; *Dacus oleae* imported into U.S.A. on olive seed from, III. 454; *Herse convolvuli* in, III. 644; fruit pests and their control in, I. 164, 167, 171, 195, 321, II. 47, 298–300, 321, 540, 573, 655, III. 36, 167, 502, 748; grain pests in, I. 39, 144, II. 153–154, III. 167; pests of prickly pear in, I. 79, II. 440, III. 126; introduction of beneficial insects into Mauritius from, II. 612; *Iridomyrmex humilis* in, III. 354; legislation against pests in, II. 83, 86, 299, 654, III. 502; locusts and their control in, I. 197, 473, II. 65, 114, 149, 155, 481, 574, III. 400, 503, 719; mites on aloes in, II. 652; pests of olive in, III. 432; *Prodenia litura* in, III. 360; termites in, III. 756; bionomics of *Thercladodes kraussi* in, I. 279.
Africa, West, *Anaphe* silk in, II. 547; *Bixadus sierricola* on coffee in, I. 22; Coccids of, I. 14, II. 353, 410; Coccinellids destroying *Aphis sorghi* in, II. 588; *Derelomus kamerunicus* on oil palms in, III. 167; *Mometa zemiodes* on cotton in, III. 168; *Stephanoderes coffeae* from, II. 240; parasites of *Stictococcus diversiseta* in, III. 434; termites from, II. 610; new wood-boring moths from, III. 168; (see also Nigeria, Gold Coast, etc.).
African Almond (see *Terminalia catappa*).
African Coffee Bug (see *Antestia variegata*).
African Horn Fly (*Lyperosia*), parasites of, liberated in Hawaii, III. 170, 712.
African Mahogany (see *Khaya senegalensis*).
African Oil Palm (see *Elaeis guineensis*).
africana, Aphis; *Ceronema*; *Gryllotalpa*; *Isandula*; *Pleurotropis*.
africanus, Coccus (*Lecanium*); *Opius*.
Afromorsia elata, Anaphe venata on, II. 548.
Afzelia palembanica, attacked by *Coptotermes gestroi* in Java, I. 355.
Agallia sinuata, on cotton in Turkestan, II. 314.

Agaon fasciatum, sp. n., in wild fig in Uganda, III. 168.
Agaon nigriventre, sp. n., from North Queensland, III. 358.
Agaonella larvalis, sp. n., in *Ficus nota* in the Philippines, I. 341.
Agathis, parasite of *Evergestis extimalis* in Russia, II. 357.
Agathis longicauda, parasite of *Phlyctaenodes sticticalis* in Russia, I. 535, III. 220.
Agathis (*Cremnops*) *vulgaris*, parasite of *Phlyctaenodes sticticalis* in U.S.A., I. 40.
Agathy (see *Sesbania aegyptiaca*).
Agati grandiflora, *Bostrychus monachus* on, in Porto Rico, I. 389.
Agauria pyrifolia, *Ceroplastes vinsoni* on, in Réunion, II. 216.
Agave, *Aspidiotus bowreyi* on, II. 533; importation of, prohibited in Mauritius, I. 399.
Agave americana var. *sisalana* (see Sisal).
Agave mexicana, *Aspidiotus destructor* on, in E. Africa, II. 429.
Agave rigida, *Pseudococcus filamentosus* on, in E. Africa, II. 146.
Agave sisalana (see Sisal).
Agelaius phoeniceus (Red-winged Blackbird), destroying insects in U.S.A., I. 226, 431, II. 227, 708.
Agelaius phoeniceus sonoriensis (Sonoran Redwing), destroying *Stictocephala festina* in U.S.A., III. 334.
Agelasta, on *Castilloa elastica* in Java, II. 535.
Agelastica (*Galeruca*) *alni*, control of, in Russia, III. 50, 109; imported into U.S.A., I. 100, II. 186.
Agelastica orientalis, on poplar, willow, etc., in Russia, II. 714.
Ageniaspis, parasite of *Prays oleellus* in Italy, I. 391.
Ageniaspis fuscicollis, mode of parasitism of, II. 599; parasite of *Hyponomeuta malinellus*, etc. in Russia, I. 347, 491, III. 147, 393, 402.
agilis, *Anystis*; *Mesochorus*; *Pristomeridia*.
aglaia, *Delias*.
Aglaope infausta, on almond in Spain, III. 276.
Aglossa pinguinalis (Tabby Moth), in stored barley in England, II. 564, III. 660.
Agonoderes pallipes, destroyed by *Lasius niger americanus*, III. 136; in U.S.A., III. 59
Agonopteryx, on citrus in India, I. 279.
Agonoscelis puberula, in E. Africa, II. 570.
agra, *Thecla*.
agrestis, *Euxoa* (*Chorizagrotis*).
agricola, *Anisoplia*.
Agricultural Associations Act (1911), in British Columbia, I. 47.
Agricultural Pests Enactment, in Malay States, II. 391, 479.
agrifoliae, *Pseudococcus*.
agrili, *Tetrastichus*; *Xylophruridea*.
agrilorum, *Entedon*.
Agrilus, in Russia, III. 393.
Agrilus anxius (Bronze Birch Borer), on birches, etc. in Canada, I. 407, III. 43, 115, 584.
Agrilus betuleti, on birch in Sweden, III. 147.
Agrilus biguttatus, in Belgium, II. 177.
Agrilus bilineatus (Two-lined Chestnut Borer), bionomics of, in U.S.A., II. 29, III. 87, 115, 162, 331, 332, 474.
Agrilus champlani, in Connecticut, I. 100.
Agrilus chrysoderes var. *rubicola*, on raspberry in France, II. 621.
Agrilus derasofasciatus, on vines in Europe and N. Africa, II. 196, 197.
Agrilus granulatus, on black alder in Carolina, I. 161.
Agrilus hastifer, bionomics of, in Russia, III. 227, 228.
Agrilus politus (Oak Twig-girdler), in U.S.A., I. 161, II. 438, III. 132. 162.
Agrilus ruficollis (Red-necked Cane Borer, Raspberry Gouty-gall Beetle), in N. America, I. 161, III. 115, 181, 551.
Agrilus sinuatus (Sinuate Pear Borer), declared a pest in Br. Columbia, I. 48; imported from France into New Jersey, II. 386; in U.S.A., III. 115, 515; parasitised by *Tetrastichus agrili*, III. 249.
Agrilus viridis, in Belgium, II. 177; on roses in New Jersey, III. 354; on maple, etc., in Russia, II. 198, III. 544.
Agrilus viridis var. *fagi*, on *Rosa rugosa* in U.S.A., III. 515.
Agrilus vittaticollis, bionomics of, in U.S.A., III. 115.
Agriophara rhombota, on tea in India, III. 489.
Agriotes, destroyed by rooks, III. 341; larvae of, destroying those of *Bibio marci*, III. 309; *Empusa carpenteri* infesting, II. 377; in Russia, I. 358, II. 198, 340, III. 67, 111, 443; on vines in Italy, III. 124; in U.S.A., III. 299.
Agriotes gurgistanus, on maize in Russia, III. 46.

Agriotes lineatus (*segetis*), a pest in Argentina, II. 638; bionomics of, on grain and other crops in Russia, I. 216, 485, 505, 531, II. 50, 51, 171, 202, 254, 265, 370, 372, 466, 502, III. 46, 221, 226, 309, 394, 399, 481, 544, 601, 606; on chicory, I. 256; bionomics of, in Cuba, III. 525; control of, in Italy, III. 59, 124; on maize in Hungary, III. 541; on oats in France, III. 428.

Agriotes mancus (Wheat Wireworm), on maize in N. America, I. 142, II. 664, III. 299.

Agriotes obscurus, in Russia, III. 309, 541.

Agriotes segetis (see *A. lineatus*).

Agromyza, introduced to destroy lantana in Hawaii, III. 757; parasitised by *Cirrospilus flavoviridis* in Utah, II. 288; revision of N. American species of, I. 506; infesting *Panicum* in U.S.A., I. 238.

Agromyza abiens, on artichokes and cardoons in France, II. 310.

Agromyza angulata, parasites of, in Indiana, I. 238, II. 288.

Agromyza bryoniae, sp. n., on vegetable marrow in France, I. 504.

Agromyza carbonaria, on birch trees in Europe, II. 307.

Agromyza chermivora, destroying *Chermes* spp., III. 598.

Agromyza fabalis, on beans and cowpeas in S. Rhodesia, I. 289.

Agromyza flaveola, on cotton in Russia, II. 314.

Agromyza inaequalis, parasitised by *Diaulinus insularis* in Porto Rico, III. 151.

Agromyza lappae, on Jerusalem artichoke, III. 33.

Agromyza nigripes, on lucerne in Europe, I. 527, II. 578.

Agromyza nigritarsis, on oats in France, III. 428.

Agromyza parvicornis, parasitised by *Opius utahensis* in U.S.A., I. 238; on maize in Porto Rico, III. 477.

Agromyza phaseoli (Bean Fly), on beans in Ceylon, II. 541, 644; parasites of, in Ceylon, III. 443; in Mauritius, II. 612; bionomics of, in Queensland, I. 192, II. 18.

Agromyza pruinosa, on birches in U.S.A., parasitised by *Sympha agromyzae*, II. 307.

Agromyza pusilla (see *A. scutellata*).

Agromyza scutellata (Serpentine Leaf-miner), in Hawaii, III. 363; parasites of, in Indiana, I. 238, II. 288; bionomics and distribution of, in U.S.A., II. 45, 46, 246, 361, III. 133.

Agromyza websteri, intercepted on wistaria in California, III. 494.

agromyzae, *Dacnusa*; *Derostenus*; *Opius*; *Sympha*.

Agropyrum, *Cephus occidentalis* on, in Canada, III. 630; *Trionymus violascens* on, in Colorado, I. 148.

Agropyrum occidentale, *Aphis avenae* not breeding on, in U.S.A., II. 696.

Agropyrum repens (Couch Grass), *Mayetiola destructor* on, in U.S.A., III. 416; *Oria musculosa* on, in Russia, III. 110; *Oscinella frit* on, in Russia, III. 600.

Agropyrum smithi, *Mayetiola destructor* on, in U.S.A., II. 225, III. 416; *Prosopothrips cognatus* on, in U.S.A., III. 577.

Agropyrum tenerum, *Mayetiola destructor* on, in Canada, III. 630.

agrorum, *Bombus*.

Agrostis, *Eriococcus* on, in Britain, III. 753.

agrotidis, *Exetastes*.

agrotina, *Monodes*.

Agrotis (Cutworms), destroyed by birds, II. 147, III. 342; on grain crops, I. 226; II. 227, III. 247, 480; on vines, I. 228, 513, II. 354, 499; parasites of, in Russia, II. 335, III. 682; resistance of, to cold, I. 149; on coffee and cotton in East Africa, I. 414.

Agrotis c-nigrum (Spotted Cutworm), on cereals in Russia, II. 197, III. 403, 639; on onions in Wisconsin, III. 570; on vegetables in Canada, II. 24, III. 629.

Agrotis crinigera, in Hawaii, III. 363.

Agrotis exclamationis (see *Feltia*).

Agrotis fennica, on leguminous crops in Canada, III. 629.

Agrotis fimbria (see *Tryphaena*).

Agrotis lineata, in Russia, I. 459.

Agrotis obscura (see *A. ravida*).

Agrotis orbona, on lettuce in France, I. 504; on vines in Italy, III. 113; caught with molasses in Russia, III. 639.

Agrotis plecta, on chicory, I. 256; on lettuce in France, I. 504.

Agrotis pronuba, on cotton in N. Africa, II. 1; in Denmark, III. 699; on lettuce and vines in France, I. 504, II. 607; on vines in Italy, III. 113; in Scotland, III. 715.

Agrotis ravida, in Russia, III. 403, 639.

Agrotis rhomboidea, on Jerusalem artichoke, III. 33.

Agrotis saucia (see *Lycophotia margaritosa*).

Agrotis segetum (see *Euxoa*).
Agrotis simulans (see *Episilia*).
Agrotis tritici var. *aquilina* (see *Euxoa*).
Agrotis unicolor (*Noctua clandestina*) (W-marked Cutworm), on vegetables, etc., in Canada, II. 24, III. 629; parasites of, in U.S.A., III. 371.
Agrotis unipuncta (see *Cirphis*).
Agrotis ypsilon (Greasy Cutworm) bionomics and control of, in Canada and U.S.A., II. 24, III. 471, 625, 628; bionomics and control of, in India, I. 507, 509, II. 139, III. 145, 320; on maize and cotton in Africa, I. 273, 287, 501, II. 1, 2; on tea and tobacco in the Far East, II. 490; in Hawaii, III. 363, 682; on tea in Trans-Caucasia, III. 65; in Russia, III. 403, 639; parasitised by *Ichneumon koebelei*, III. 682.
Agrypnus fuscipes, on sugar-cane in Mauritius, I. 31.
Agrypon flaveolatum, parasite of vine moths in France, I. 524.
Agrypon tenuicorne, parasite of *Hyponomeuta malinellus* in Russia, I. 347.
Ahuacate, May beetles on, in Porto Rico, I. 389; *Serica* spp. on, in California, III. 625.
Ailanthus, *Aspidiotus perniciosus* on, I. 472; *Aulacaspis rosae* on, III. 80; *Parandra brunnea* on, in U.S.A., III. 671.
Ailanthus glandulosa, disease of, in France, II. 646.
ainsliei, *Chrysocharis*.
ajax, *Papilio*.
Ajuga reptans, *Kakothrips robustus* on, in France, III. 279.
Akebia, *Aspidiotus perniciosus* on, II. 390.
Akridin, against *Cydia pomonella*, I. 489.
Alabama, *Anthonomus grandis* and its control in, I. 186, II. 389, 650, 694; insect pests in, I. 101, 353, 429, 517, II. 600, III. 510, 586.
Alabama, I. 47.
Alabama argillacea (Cotton Moth, Cotton Worm), on cotton in Argentina, II. 207; bionomics and control of, in Canada and U.S.A., I. 53, 169, 266, 406, 455, II. 253, 272, 345, 694, III. 90, 273, 327, 447, 513, 536, 687; on cotton in Peru, I. 183; bionomics of, on cotton in the West Indies, I. 83, 263, II. 87, 142, 144, 575, III. 22, 302, 411, 736.
alacris, *Trioza*.
alaiae, *Hemichionaspis*.
alatus, *Aspidiotus*; *Ceratocolus*.
Alaus, in dead wood in U.S.A., III. 299.
alaus, *Chelifer*.
alba, *Polyphylla*.
Albania, cultivation of *Pyrethrum cinerariaefolium* in, I. 230.
albasiphus, *Symdobius*.
Alberia gardneri, *Xyleborus fornicatus* on, in Ceylon, II. 513.
Alberta, *Anaphothrips striatus* on oats in, II. 382; cutworm investigation in, II. 487; *Haltica ignita* in, I. 299; insects on pine and spruce in, II. 25; pests of cereals in, I. 412; *Pissodes* in, I. 407; *Porosagrotis delorata* on grain crops in, II, 381; (see Canada).
albicapitana, *Rhyacionia* (*Evetria*).
albiceps, *Phytomyza*; *Sarcophaga*.
albicillata, *Cidaria*.
albicilliella, *Menestra*.
albicinctus, *Aeolothrips*; *Ichneumon*.
albida, *Syneta*.
albidipennis, *Dysdercus*; *Oxycarenus*.
albiditarsis, *Meteorus*.
albidum, *Limnerium*.
albidus, *Enchytraeus*.
albifrons, *Megastigmus*; *Spilochalcis* (*Smicra*); *Tettigonia* (*Decticus*).
albiger, *Ichneumon*.
albilinea, *Meliana* (*Heliophila*).
albimanus, *Platycheirus*.
albinella, *Scirpophaga*.
Albinia casazzae (see *Cryptoblabes gnidiella*).
Albinia wokiana (see *Cryptoblabes gnidiella*).
albipartalis, *Mussidia*.
albipennis, *Plagiognathus*; *Triphleps*.
albipes, *Aphelinoidea semifuscipennis*; *Ceraphron*; *Cladius* (see *Priophorus padi*); *Psylla*; *Technomyrmex*.
Albizzia, pests of, in Ceylon, II. 654, III. 61, 123; borers of, in Java, II. 535; *Melisomimas metallica*, sp. n. on, in W. Africa, III. 168.
Albizzia blumei, *Olenecamptus bilobus* on, in Java, II. 535.
Albizzia fastigiata, *Anaphe venata* on, in the Congo, II. 548.
Albizzia lebbek, *Batocera rubus* on, in Mauritius, III. 730; pests of, in Egypt, I. 121, II. 146, 147, 505; pests of, in East Africa, II. 146, 429; *Oxyrhachys tarandus* on, in India, II. 242.
Albizzia moluccana, *Xyleborus fornicatus* on, in Ceylon, II. 513.
Albizzia odoratissima, *Pseudococcus filamentosus* on, in E. Africa, II. 146.

Albizzia procera, *Coptotermes gestroi* on, in Java, I. 355; *Pseudococcus filamentosus* on, in E. Africa, II. 146.
Albizzia stipulata, trap logs of, against *Ficus* borers in Java, II. 535; attacked by locusts in Bengal, III. 755; pests of, in Ceylon, II. 513, III. 123; *Pseudococcus filamentosus* on, in E. Africa, II. 146.
albizziae, *Tachardia*.
alboannulatus, *Dirhinus*.
albofasciatus, *Denops*.
albofimbriatus, *Lithurgus*.
albohirta, *Lepidiota*.
albomarginatus, *Chorthippus*.
albopictus, *Hypamblys*.
albus, *Thomisus*.
alcestes, *Chrysopa*.
alchymista, *Catephia*.
Alcides, on *Tectona grandis* in India, III. 723.
Alcides brevirostris, on cotton in Africa, I. 414, II. 1, 580.
Alcides leeuweni, on cacao in Java, I. 4.
alciphron, *Hypsa* (see *H. caricae*).
Alcohol, in baits for vine moths, I. 451; useless against *Lonchaea chorea*, I. 435; 70 per cent. ineffective as an insecticide, III. 285.
Aldabra, *Technomyrmex albipes* absent from, II. 567.
Aldehydes, as traps for thrips, II. 271; not attractive to *Kakothrips robustus*, III. 280.
Alder (*Alnus*), pests of, in Britain, II. 192, III. 346; pests of, in Canada and U.S.A., I. 140, 142, 161, 298, II. 294, 386, 390, 674, 711, III. 194, 580, 668, 686; pests of, in France, I. 333, II. 402, III. 694; pests of, in Holland, I. 385, 386, III. 196; pests of, in Norway, III. 108, 697; pests of, in Russia, II. 11, 331, 640, III. 50; *Anobium striatum* on, in Sweden, III. 255.
Alder Flea-beetle (see *Haltica bimarginata*).
Alderson's Dip, against termites, I. 465.
aldrichii, *Psilocephala*.
alecto, *Prophanurus*.
Aleochara anthomyiae, predaceous on *Chortophila brassicae* in U.S.A., III. 369; predaceous on *Hylemyia antiqua* in Wisconsin, III. 569.
Aleochara bilineata, predaceous on *Chortophila brassicae*, III. 616, 618.
Aleochara nitida, predaceous on *Chortophila brassicae*, II. 665, III. 1, 616–618.
Alesia striata, destroying scale-insects and Aphids on cotton in Africa, II. 2, 579, 581, III. 649.
Aleurobius farinae (see *Tyroglyphus*).
Aleurocanthus woglumi, bionomics of, in Jamaica, III. 651, 724.
Aleurochiton, parasitised by *Entedononecremnus unicus*, sp. n., in British Guiana, III. 724.
Aleurochiton aceris, on maple in Russia, III. 543.
Aleurochiton forbesi, on maple in U.S.A., III. 709.
Aleurodes (Whitefly), fungi infesting, I. 266–268, II. 129, III. 23, 136, 325, 651; on coconuts in Barbados, II. 143; control of, in Britain, III. 675; on coconut in British Guiana, II. 569; on citrus, legislaton against in British Guiana, III. 175; in India, I. 279; intercepted in quarantine in U.S.A., II. 186, III. 117, 355, 469, 494, 513.
Aleurodes aurantii, on oranges in the Himalayas, I. 278.
Aleurodes bambusae, on bamboo in Coimbatore, II. 139.
Aleurodes bergi, in India, III. 145; on sugar-cane in Mauritius, I. 31.
Aleurodes citri (Citrus Whitefly), quarantine against, in U.S.A., I. 85; intercepted in quarantine in California, III. 626; intercepted in quarantine in Hawaii, III. 548; legislation against, in Tennessee, III. 657; natural enemies of, I. 266, 278, III. 136; on citrus in India, I. 279; on citrus, etc., in U.S.A., I. 186, III. 22, 145, 325, 349, 444; on citrus in Argentina, III. 694; parthenogenesis in, III. 285.
Aleurodes cocois (see *Aleurodicus*).
Aleurodes howardi (Woolly Whitefly), on citrus in Florida, I. 267, III. 22, 325, 444.
Aleurodes longicornis, in Java, III. 318.
Aleurodes nubifera (Cloudy-winged Whitefly), infested with *Aschersonia flavicitrina*, II. 129; legislation against, in Tennessee, III. 657; on citrus in Florida, I. 186, III. 22, 444; on tomato in New Zealand, III. 80; quarantine against, on citrus, in U.S.A., I. 85.
Aleurodes ricini, on castor in India, III. 145.
Aleurodes tabaci, on tomato in Florida, III. 179.
Aleurodes vaporariorum (Greenhouse Whitefly), bionomics of, in Britain, III. 285, 287, 500, 747; in U.S.A., III. 761.

Aleurodicus, on coconuts in the South Sea Islands, II. 3.
Aleurodicus cocois, (Coconut Whitefly), on coconuts, etc., in the West Indies, I. 268, II. 87, 143, 691; on coconuts in British Guiana, II. 569.
Aleurodicus destructor, on coconuts in the South Sea Islands, II. 3.
Alfalfa (see Lucerne).
Alfalfa Butterfly (see *Colias eurytheme*).
Alfalfa Crane Fly (see *Tipula simplex*).
Alfalfa Looper (see *Phytometra californica*).
Alfalfa-Seed Chalcid (see *Bruchophagus funebris*).
Alfalfa Weevil (see *Hypera variabilis*).
Algeria, apricot pests in, III. 739; pests of cereals in, I. 43, 375, 422, 446, II. 231–233, 283; Coccids infesting kola nuts in, III. 547; Cochineal culture in, I. 315; *Diaspis taxicola*, sp. n., on *Taxus baccata* in, II. 92; *Filippia oleae* on *Hedera helix* in, II. 377; locusts and their control in, II. 24, 238, 462, 475, 594, 681, III. 40, 118, 400, 427, 523, 699; measures relating to importation of plants into, II. 594, III. 101; *Myelois phoenicis* on dates in, III. 762; pests of olives in, I. 419, II. 125, 349, III. 99; pests of oranges in, II. 228, 230, III. 102; *Phthorimaea operculella* on potato in, I. 102, II. 280, 401; *Pulvinaria psidii* on *Schinus terebinthifolia* in, III. 173; pests of vines in, II. 196, 323, 445, 446, 556, 596, 608, III. 427; *Xanthoecia flavago* (*Gortyna ochracea*) on artichokes in I. 410; *Zeuzera pyrina* on cork-oaks in, I. 396.
algira, Grammodes.
algirus, Brachycerus.
Alhagi camelorum (Camel Thorn), *Orgyia dubia* on, in Astrachan, III. 219.
alienus, Lasius.
Alisma plantago, Rhopalosiphum nymphaeae on, in Egypt, III. 749.
Alisma plantago-aquatica, Rhopalosiphum nymphaeae on, in U.S.A., III. 631.
Allamanda, not attacked by *Pseudococcus filamentosus* in E. Africa, II. 146.
alliaceus, Parapleurus.
alliaria, Eupithecia (*Tephroclystis*).
Alligator Pear (see Avocado).
Alligator Pear Weevil (see *Heilipus lauri*).
allii, Aphis.
Allium sativum (see Garlic).
Allocerellus inquirendus, sp. n., on olive in Africa, III. 432.
Allograpta fracta, destroying *Macrosiphum rosae* in U.S.A., II. 527.
Allograpta obliqua, destroying *Monellia caryae* in California, III. 142.
allograptae, Pachyneuron.
Allomphale cavasolae, sp. n., parasite of *Dacus oleae* in Eritrea, III. 173, 432.
Allorrhina, resistance of larvae of, to *Micrococcus*, II. 639.
Allorrhina mutabilis, on figs and peaches in Arizona, I. 180.
Allorrhina nitida (June Bug), on maize in Maryland, II. 361; control of, on grapes in U.S.A., III. 558; natural enemies of, in U.S.A., III. 356, 566.
Allotria minuta, parasite of *Aphis rumicis* (*euonymi*), II. 620.
Alloxysta crassa, parasite of *Aphis rumicis* (*euonymi*), II. 620.
Alloxysta peraperta, parasite of *Euphyllura aethiopica* in Eritrea, III. 432.
allyni, Eupelmus.
almana, Precis (*Junonia*).
Almond (*Amygdalus communis*), resistant to *Eriosoma lanigerum*, II. 163; *Eurytoma amygdali* in seeds of, in Bulgaria, II. 348; *Hyponomeuta malinellus* on, in France, I. 227; pests of, in Italy, I. 222, II. 328, 346, III. 124, 431; pests of, in Spain, III. 276; pests of, in Turkestan, II. 714, 715; pests of, in U.S.A., I. 134, 418, II. 300, 347, 390, 439, 555, 707, III. 120, 461, 493, 690; pests of, in the West Indies, I. 99, 189, 389.
Almond, African (see *Terminalia catappa*).
Almond Mite (see *Bryobia pretiosa*).
alni, Agelastica; *Aphrophora*; *Rhynchaenus* (*Orchestes*); *Psylla.*
alnifoliae, Prociphilus.
Alnus (see Alder).
Alnus incana, Haltica bimarginata on, in Maine, I. 142.
Alnus rhombifolia, Aphids on, in California, III. 686.
Aloë, Chionaspis on, in Africa, III. 433.
Aloë transvaalensis, mites on, in S. Africa, II. 652.
Aloes, Bitter, added to copper spray against *Otiorrhynchus*, II. 608; extract of, against grasshoppers, III. 188.
aloeus, Strategus,
Alopecurus geniculatus, Myochrous denticollis on, in U.S.A., III. 574.

Alopecurus pratensis, Oscinella frit on, in Moscow, II. 371.
Alpha grass (see *Macrochloa tenacissima*).
Alsace, Coccidae in, II. 98; *Filippia oleae* on *Hedera helix* in, II. 377.
Alsike clover (see *Trifolium hybridum*).
Alsophila pometaria (Fall Canker Worm), bionomics and control of, in Canada and U.S.A., I. 48, 281, 404, II. 113, 537, III. 69, 70, 137, 162, 335.
Alstonia scholaris, Coccus viridis on, in Ceylon, II. 191.
alternans, Calosoma; *Pimpla.*
alternata, Serica.
alternator, Habrocryptus.
alternus, Stauropus.
althaeae, Tetranychus.
alticeps, Bolyphantes.
Alucita (*Pterophorus*) *galactodactyla*, on Jerusalem artichoke, III. 33.
Alucita sacchari, on sugar-cane in Mauritius, I. 31.
Alum, added to Bordeaux Mixture, III. 292.
Alurnus corallinus, on *Cocos romanzoffiana* in Brazil, III. 695.
Alurnus marginatus, on coconuts in Brazil, III. 695.
Alurnus quadrimaculatus, on *Cocos romanzoffiana* in Brazil, III. 695.
alvae, Aphis.
alvearius, Trichodes.
Alysia apii, parasite of *Acidia heraclei* in France, III. 188.
Alysia manducator, parasite of *Chortophila brassicae*, III. 1, 370.
Alysia ruficeps, parasite of *Chortophila brassicae* in Europe, III. 1.
amabilis, Drasterius.
amanicum, Ctonoxylon.
Amara apricaria, destroying *Bothynoderes punctiventris* in Russia, II. 179. III. 138.
Amara farcta, predaceous on *Otiorrhynchus ovatus* in Canada, III. 8.
Amara polita, imported from England into New Jersey, III. 354.
Amara stupida, on strawberry vines in California, II. 555.
Amaranthus, Laphygma exigua on, in India, II. 248; *Pachyzancla bipunctalis* on, in Porto Rico, III. 477; pests on, in U.S.A., I. 40, 243, 430; *Tychea phaseoli* on, III. 749.
Amaranthus paniculatus (Pigweed), *Laphygma exigua* on, in Rhodesia, III. 359.
Amaranthus retroflexus (Careless Weed), pests on, in Russia, I. 360, III. 93; pests on, in U.S.A., I., 40, II. 303, III. 122.
Amaranthus spinosus, Diabrotica graminea on, in Porto Rico, III. 476.
Amaryllis, *Merodon equestris* on, in California, II. 246; *Merodon equestris* on, in England, II. 88.
Amata (*Syntomis*) *cyssea*, in India, III. 145.
Amatissa consorta, on tea and camphor in Ceylon, II. 597, III. 489.
amaurocoela, Pleurotropis.
ambasius, Xyleborus.
ambigua, Hippodamia; *Lepidosaphes.*
ambigua ramulorum, Myrmelachista.
ambiguella, Clysia (*Conchylis*).
ambiguus, Platylabus; *Psallus.*
Amblyspatha ormerodi, sp. n., on clover in Britain, I. 242, III. 660.
Amblyteles flavizonatus, parasite of *Agrotis unicolor* in U.S.A., III. 371.
Amblyteles homocerus, parasite of *Colias* in France, II. 577.
Amblyteles panzeri, parasite of *Euxoa segetum* in Russia, I. 540.
Amblyteles suturalis, parasite of *Agrotis unicolor* in U.S.A., III. 371.
Amblyteles vadatorius, parasite of cutworms in Russia, I. 540, II. 212, 342.
Amboina, *Dacus ferrugineus* on *Eugenia malaccensis* in, I. 157.
Ambrosia (Ragweed), corn root aphis on, in Illinois, I. 124.
Ambrosia beetles, I. 51, 247, II. 25, III. 3; classification of, III. 274.
Ambrosia Fungus, associated with *Xyleborus* spp., II. 158, 402, 414.
ambusta, Epicauta.
Ameiva surinamensis, destroying froghoppers in Trinidad, II. 62.
Amelanchier, Aphids on, in Maine, III. 423; *Eriocampoides limacina* on, in Quebec, II. 665; *Lymantria dispar* on, in U.S.A., III. 668.
Amelanchier alnifolia, Prociphilus alnifoliae on, in Colorado, III. 351.
Amelanchier canadensis (June Berry, Shadbush, Service Berry), *Systena marginalis* on, in Ottawa, I. 299; pests of, in U.S.A., I. 140, II. 120, 390, 711.
Amelanchier vulgaris, Byturus tomentosus on, in Moscow, I. 206.
Ameloctonus, parasite of *Polychrosis viteana* in U.S.A., I. 113.
amentivora, Pontania.
America, *Chermes strobi* imported from, into Europe, II. 14; *Chortophila brassicae* and *Hylemyia antiqua* imported into, III. 1; monograph of Delphacidae of,

II. 441; *Eriosoma lanigerum* indigenous in, III. 718; insect egg-parasites in, II. 310; *Megilla maculata* imported from, into Java, I. 14; *Merodon equestris* in, II. 246; monograph of Psyllidae of, II. 601.

America, Central, Braconid parasites of *Anastrepha* from, II. 317; *Ephestia kühniella* indigenous in, I. 293; *Eriopus floridensis* in, II. 92; *Heilipus lauri* in, II. 189; locusts of, I. 341; pests of palms in, II. 99; *Thyrsocera cincta* destroying Argentine ants in, I. 327; *Toxotrypana curvicauda* on papaws in, III. 81; (see Mexico, etc).

America, North, Aphids in, III. 541, 748, 762; *Aspidiotus perniciosus* on fruit imported from, II. 281; Chalcidoidea from, I. 297, 549, III. 691; *Cryptococcus fagi* imported into, II. 203; *Hypothenemus eruditus* on cotton in, I. 351; *Pediculoides* attacking *Isosoma* in, II. 473; *Phlyctaenodes sticticalis* in, I. 360; *Phylloxera vastatrix* in, I. 205, III. 764; new sawflies in, III. 77; new Tachinids from, II. 495; distribution of *Tetranychus telarius* in, III. 13; (see also Canada and U.S.A.).

America, South, pests of, likely to be imported into U.S.A., I. 103; leaf-cutting ants of, II. 28; *Tetranychus telarius* in, III. 13; (see Argentina, Brazil, etc.).

American Blight (see *Eriosoma lanigerum*).

American Cotton Tree (see *Eriodendron anfractuosum*).

American Elm (see *Ulmus americana*).

American Elm-leaf Aphis (see *Eriosoma americanum*).

American Insect Powder, against *Eriocampoides aethiops*, I. 386, II. 641.

American Plum Borer (see *Euzophera semifuneralis*).

American Silver Fir (see *Abies nobilis* var. *glauca*).

American Tent Caterpillar (see *Malacosoma americana*).

American Vine-stocks, introduction of, into Europe against *Phylloxera* II. 517; immunity of, to *Phylloxera*, I. 18, II. 586.

American Walnut Aphis (see *Monellia caryae*)

americana, Chionaspis; *Cimbex*; *Malacosoma*; *Meromyza*; *Periplaneta*; *Plagia*; *Schistocerca*; *Theronia*; *Xymenia*.

americanum, Eriosoma (*Schizoneura*).

americanus, Eunotus; *Lasius niger*; *Perilitus*; *Syrphus*.

amerinae, Clavellaria.

Amerrhinus pantherinus, on coconuts in Brazil, III. 695.

Amersibia prionoxysti, sp. n., parasite of *Prionoxystus* in U.S.A., III. 658.

amethystinus, Hylotrupes.

amica, Admontia.

Amicroplus (*Macrocentrus*) *collaris*, parasite of *Feltia exclamationis* and *Euxoa segetum* in Russia, I. 540, II. 212, III. 46.

amicus, Sympherobius.

Amines, list of plants with odour of, III. 441; odour of, attracting insects, III. 441.

Amirante Islands, *Technomyrmex albipes* absent from, II. 567.

ammios, Trichodes.

Ammonia, and Paris Green as a spray, I. 361, 362, 367; as a fumigant, II. 253, III. 330, 692; as an insecticide, II. 349; damaging foliage, III. 350; in emulsion against *Psylla mali*, II. 628; in emulsion against vine moths, II. 411.

Ammonia Water, against *Heterodera radicicola*, III. 267; against pests of pumpkins in Queensland, II. 19.

Ammonium Sulphate, against wireworms, I. 378, III. 59; against *Lonchaea chorea*, I. 435.

Ammophila, destroying cutworms, in Russia, II. 248.

Ammophila instabilis, destroying cutworms in Australia, III. 78.

Amnesia, on pear in California, II. 555.

amoena, Urellia.

Amorbia emigratella, on tobacco in Hawaii, II. 630; parasitised by *Chalcis obscurata* in Hawaii, III. 681, 757.

Amorpha populi, in Holland, III. 742; experiments with *Pimpla* and, II. 215.

Amorphota ephestia, parasite of *Ephestia kühniella* in New South Wales, I. 119.

ampelinus, Rhinoctonus.

ampelophaga, Haltica; *Procris* (*Ino*).

Ampelophil, useless against *Clysia ambiguella*, II. 683.

ampelophila, Aphis.

Ampelopsis, Aspidiotus tasmaniae, sp. n., on, in Australia, III. 548; concealing odour of baits for vine moths, I. 10; restrictions regarding removal of, in South Africa, II. 84.

Ampelopsis quinquefolia (see Virginia Creeper).
Ampelopsis veitchi, Typhlocyba comes on, in Toronto, I. **400.**
Ampelosucta illata, on vines in Italy, III.**113.**
Amphicallia tigris, on maize in East Africa, I. **415.**
Amphicerus bicaudatus (Grape Cane Borer), in U.S.A., III. **181.**
Amphicerus punctipennis, bionomics of, in California, II. **113.**
Amphimallus (*Rhizotrogus*) *solstitialis*, on lettuce in France, I. **504**; in Holland, III. **743**; bionomics of, on crops in Russia, I. **526**, II. **110, 172, 260, 366, 714**, III. **47, 75, 226, 341, 399, 402, 481.**
Amphipyra pyramidea, on walnut in Russia, III. **206.**
Amphipyra tragopogonis, on spinach in Russia, I. **69.**
Amphorophora lactucae (see *Rhopalosiphum*).
Amphorophora rubicola, on *Rubus nutkanus* in California, II. **251.**
Amphorophora subterrans, sp. n., on *Dactylis glomerata* in Oregon, III. **588.**
amplana, Cydia (*Grapholitha*).
amplectens, Mylabris.
ampliata, Aeolesthes.
amputator, Oncideres.
Amsacta lactinea, on cotton, rice, etc., in the Far East, II. **490.**
Amsinckia intermedia, Irbesia spp. on, in California, II. **555.**
amygdali, Aphis; *Eurytoma*; *Oxycarenus*; *Scolytus.*
Amygdalus communis (see Almond).
Amyl Alcohol, an ingredient of Nessler liquid against *Eriosoma lanigerum*, II. **77.**
Amyl Acetate, as an insecticide, III. **284.**
Anabrus simplex, on crops in U.S.A., III. **263. 466.**
Anacampsis biguttella, on lucerne in Europe, I. **527.**
Anacardium occidentale, not attacked by *Pseudococcus filamentosus* in East Africa, II. **146**; *Heliothrips rubrocinctus* on, III. **662.**
anachoreta, Pygaera.
Anagrus armatus, parasite of *Stenocranus* (*Delphax*) *saccharivora* in Porto Rico, III. **26, 134.**
Anagrus armatus var. *nigriceps*, parasite of *Empoasca rosae* in U.S.A., III. **724.**
Anagrus flaveolus, parasite of *Peregrinus maidis* in Trinidad, I. **259**, II. **575.**
Anagrus frequens, imported into Hawaii, III. **758.**
Anagrus ovijentatus, sp. n., parasite of *Lygus pratensis* in Canada, II. **593.**
Anagyrella corvina sp. n., parasite of *Pseudococcus* sp. in U.S.A., III. **724.**
anale, Sinoxylon.
analis, Anoplognathus; *Archytas.*
ananas, Tarsonemus.
Ananassa sativa (see Pineapple).
ananassae, Pseudococcus.
Ananca (see *Sessinia*).
anandi, Microtermes.
Anatha lateralis, parasite of *Eurygaster integriceps* in Russia, I. **448.**
Anaphe, parasites of, in Africa, II. **530, 548.**
Anaphe infracta, bionomics of, in the Belgian Congo, II. **548**; parasitised by *Oneilella formosa*, II. **530**; producing silk in Uganda, I. **33**, II. **592.**
Anaphe venata, bionomics of, in the Belgian Congo, II. **548.**
Anaphes, parasite of *Coleophora laricella* in Europe, I. **63**; parasite of *Hypera variabilis*, in France, II. **577**; parasite of *Sciaphobus squalidus* in Russia, II. **338.**
Anaphes gracilis, parasite of *Aspidiotus perniciosus*, II. **165**, III.**192.**
Anaphinis, parasite of *Rhynchites pauxillus* in Russia, III. **613.**
Anaphothrips striatus, bionomics of, in Canada, II. **383**; predaceous on *Taeniothrips pyri*, III. **463.**
Anapus freyi, on grain crops in Russia, II. **198.**
Anarsia lineatella (Peach Twig Borer, Peach Worm), bionomics of, in Canada and U.S.A., I. **91, 283**, II. **300, 343, 344, 413, 433, 439, 663**, III. **259, 327, 419**; declared a pest in British Columbia, I. **48**; distribution of, II. **419**; quarantine measures against in U.S.A., I. **85**; introduced into U.S.A. from Western Asia, II. **300.**
Anarta myrtilli, parasitised by *Heteropelma calcator* in Russia, III. **49.**
anartoides, Teia.
Anasa tristis (Squash Bug), bionomics and control of, on Cucurbitaceous plants in Canada and U.S.A., I. **80, 161, 180, 419**, II. **117, 456, 459**, III. **471, 552.**
Anastatus, parasite of Katydids in California, III. **653, 654.**
Anastatus bifasciatus, parasite of *Lymantria dispar*, II. **136, 295, 343**, III. **329, 507.**
Anastatus koebelei, in bait-traps for *Ceratitis capitata*, III. **568.**

Anastatus semiflavidus, parasite of *Hemileuca oliviae* in New Mexico, III. **151.**
Anastatus tachardiae, parasite of *Tachardia albizziae* in Ceylon, I. **275.**
Anastoechus (*Systoechus*) *nitidulus*, parasite of locusts in Russia, II. **718**, III. **636.**
Anastrepha, Braconid parasites of, in Mexico and Central America, II. **317**; in mangos in Porto Rico, I. **390.**
Anastrepha fraterculus, parasitised by *Biosteres* spp. in Brazil, I. **321**; on fruit in Brazil, III. **387.**
Anastrepha ludens (Orange Fruit Fly, Mexican Fruit Fly); decoction of *Haplophyton cimicidum* against, III. **37**; parasitised by *Diachasma* sp., I. **321**; intercepted in guavas in California, III. **623, 626**; on citrus in Mexico, II. **77.**
Anastrepha peruviana, a fruit pest in Peru, I. **516.**
Anastrepha serpentina, a new pest of fruits in Brazil, III. **387.**
Anastrepha striata, in guava in Costa Rica parasitised by *Diachasma crawfordi*, I. **321.**
anastrephae, Opius.
Anatherum bicorne, in British Guiana, III. **675.**
anatipennella, Coleophora.
Anatis ocellata, predaceous on *Mindarus abietinus* in U.S.A., III. **474.**
Anatis quindecim-punctata, parasitised by *Perilitus americanus* in Virginia, II. **131.**
anatolicus, Stauronotus.
Anatragus ornatus, on coffee in East Africa, I. **414.**
Anaulacomera insularis, on coconut in the South Sea Islands, II. **3.**
ancetella, Acrolepia.
anchisiades, Papilio.
Anchonocranus oleae, in olives in Cape Colony and Transvaal, III. **432.**
Anchonocranus oleae var. *pallida*, v. nov., in olives in Eritrea, III. **432.**
Anchusa italica, *Aphis symphiti* on, in Britain, III. **762.**
Ancylis comptana (Strawberry Leaf-roller), declared a pest in British Columbia, I. **48**; on strawberries in Canada and U.S.A., I. **168, 475**, III. **425.**
Ancylis mitterbacheriana, on *Corylus* in Russia, II. **672.**
Ancylolomia chrysographella, on rice in the Far East, II. **489**; on rice, etc. in India, I. **170**, II. **68.**
ancylus, Aspidiotus.
Andaman Islands, *Progenius laeviusculus* on *Pterocarpus indicus* in, III. **723.**
andersoni, Pseudococcus.
Andraca bipunctata, on tea in India, III. **488.**
andraemon, Papilio.
Andrallus spinidens, preying on *Parnara mathias* in India, II. **487.**
andreae, Dysdercus.
Andres-Maire Traps, use of, against *Agrotis*, I. **507, 509**, III. **320**; against vine moths in France, II. **411.**
andrewesi, Xyleborus.
Andricus curvator, on *Quercus pedunculata* var. *praecox* in Russia, III. **437.**
Andricus fecundatrix, on oak in Bessarabia, III. **225.**
Andricus seminationis, on *Quercus pedunculata* var. *tardiflora* in Russia, III. **438.**
Andricus testaceipes, galls of, eaten by birds, I. **169.**
Androdiplosis coccidivora, sp. n., parasite of scale-insects, III. **725.**
Andromeda japonica, *Tingis rhododendri* on, in Holland, II. **641.**
Andropogon, *Aphis avenae* on, in U.S.A., II. **696.**
Andropogon furcatus, *Blissus leucoptera* on, in Kansas, II. **227**; *Prosopothrips cognatus* on, in U.S.A., III. **578.**
Andropogon scoparius, *Blissus leucoptera* on, in Kansas, II. **227**; *Prosopothrips cognatus* on, in U.S.A., III. **578.**
Andropogon sorghum (see Sorghum).
Anemone, *Pseudococcus affinis* on, in California II. **435.**
Anerastia ablutella, on sugar-cane in India, I. **169.**
Aneristus ceroplastae, imported into Hawaii, III. **757.**
angela, Sycoscaptella.
Angelica silvestris, *Acidia heraclei* on, in France, III. **188.**
Angelin, *Saissetia nigra* on, in Barbados, I. **198.**
Angerona prunaria, Hymenopterous parasites of, in Russia, III. **401.**
Angitia areolaris, parasite of vine moths in Russia, III. **211.**
Angitia armillata, parasite of *Hyponomeuta malinellus* in Russia, I. **347**, III. **204.**
Angitia chlorosticta, parasite of *Phlyctaenodes sticticalis* in Russia, III. **220.**
Angitia chrysosticta, parasite of *Phlyctaenodes sticticalis* in Russia, I. **535.**

Angitia exareolata, parasite of vine moths in Russia, III. 211.
Angitia fenestralis, parasite of *Plutella maculipennis* in Russia, III. 46; parasite of vine moths in Russia, III. 211.
Angitia (*Dioctes*) *melania*, parasite of vine moths in Russia, III. 211.
Angitia plutellae, parasite of *Plutella armoracia* in U.S.A., I. 177.
Angitia tenuipes, parasite of *Polychrosis botrana* in Australia, III. 497.
Angitia (*Limnerium*) *tibialis*, parasite of *Hyponomeuta malinellus* in Russia, III. 481.
Angitia vestigialis, parasite of vine moths in Russia, III. 211.
Angola, bee culture on frontiers of, I. 27; *Hemichionaspis proxima* on *Calotropis procera* in, II. 354; search for parasites of *Ceratitis capitata* in, II. 316; *Stephanoderes coffeae* on coffee in, I. 351, II. 241; termites from, II. 610.
angolensis, *Chilocorus*.
Angoumois Grain Moth (see *Sitotroga cerealella*).
Anguilla, *Lachnopus valgus* on cotton in, III. 22.
Anguis fragilis, II. 326.
angulata, *Agromyza*; *Epeira*; *Physalis*.
angulicollis montana, *Chalcophora*.
angulifera, *Draeculacephala*.
anguliferella, *Ornix* (*Paronix*).
angusta, *Chionaspis*.
angustatus, *Calocoris*; *Nysius*.
angustiorana, *Batodes* (*Capua*).
angustipennis, *Ctenophora*; *Melanoplus*; *Oecanthus*; *Tipula*.
angustus, *Cryptocampus*; *Sympherobius*.
Anilasta, parasite of *Acronycta rumicis* var. *turonica* in Russia, II. 313.
Anilasta ebenina, parasite of *Pieris brassicae*, II. 588, III. 46; parasite of *Pieris daplidice* in Astrachan, I. 537, II. 356, III. 637.
Aniline, as an insecticide, III. 284; spraying with, against *Calandra granaria*, III. 129.
animosa, *Glypta*.
Anisaldehyde, against thrips, cost of, II. 271.
Anisandrus (see *Xyleborus*).
Anise Oil, against grasshoppers, II. 250.
Anisodactylus harpaloides, attacking *Blissus leucoptera* in Kansas, II. 227.
Anisoplia, in Russia, II. 47.
Anisoplia agricola, on maize in Germany, II. 500.
Anisoplia aprica var. *brenskei*, on rye and wheat in Russia, III. 222, 481.
Anisoplia austriaca, bionomics and distribution of, in Russia, I. 357, 458, 460, 494, 532, II. 34, 43, 171, 201, 259–261, 648, III. 41, 51, 67, 103, 226, 229, 337, 342, 402, 443, 480, 601, 635.
Anisoplia austriaca var. *major*, in Russia, II. 47.
Anisoplia crucifera (see *A. cyathigera*).
Anisoplia cyathigera, on grain crops in Russia, II. 172, 261, III. 47, 50, 51, 205, 222, 309, 402, 480.
Anisoplia deserticola, bionomics of, in Russia, I. 486, II. 110, III. 606; mistaken for *Blitopertha lineolata*, I. 486, II. 466.
Anisoplia segetum, on grain in Russia, I. 487, II. 110, 172, 261, III. 47, 50, 205, 222, 480.
Anisoplia villosa (see *A. agricola*).
Anisoplia zwickii, in Russia, II. 47.
anisopliae, *Metarrhizium* (*Penicillium*).
Anisopteryx aescularia, in orchards in Holland, II. 642.
Anisosticta novemdecimpunctata, predaceous on Aphids in Russia, III. 220.
Anisota senatoria, on oaks in Maryland, II. 120.
annexa, *Feltia*.
annularis, *Ascogaster*; *Polistes*.
annulata, *Deilemera* (*Nyctemera*); *Dericorys*.
annulatus, *Polistes*; *Sphaerocoris*.
annulicornis, *Adelphocoris*.
annulipes, *Eriocampoides* (*Eriocampa*).
annulus var. *ocellus*, *Sphaerocoris*.
Anobium, in timber and furniture in Sweden, II. 100.
Anobium brunneum, on *Corylus* in Russia, II. 672.
Anobium domesticum, in timber in Britain, III. 677, 715.
Anobium paniceum (see *Sitodrepa*).
Anobium pertinax, bionomics of, in Sweden, III. 255; in timber in Norway, III. 697.
Anobium striatum, bionomics of, in Sweden, II. 100, III. 255; in timber in Norway, III. 697.
Anochetus inermis, destroying froghoppers in Trinidad, II. 62.
Anoecia corni, not a pest in Taurida, I. 359; on grain in Russia, II. 171; on *Cornus sanguinea* in Russia, III. 45; on *Svida stolonifera* in U.S.A., III. 351.
Anoecia willcocksi, sp. n., on wheat in Egypt, III. 749.

Anogeissus latifolia, Cossid in, in India, III. 723.
Anomala, experiments with *Elis sexcincta* and, in Hawaii, III. 681; imported into Hawaii, III. 289, 657.
Anomala aenea, on vines in Italy, III. 112; control of, on vines in Russia, I. 538, II. 110, III. 222, 228, 543.
Anomala aeneotincta, on cotton in Togoland, I. 349.
Anomala antiqua, in Queensland, III. 491.
Anomala ausonia var. *sicula*, on vines in Italy, III. 112.
Anomala australasiae (see *A. antiqua*).
Anomala frischi (see *A. aenea*).
Anomala kersteni, on coffee in E. Africa, II. 570.
Anomala orientalis, on sugar-cane imported into Hawaii from Japan, I. 374.
Anomala pallida, in S. Rhodesia, III. 174.
Anomala pinguis, in S. Rhodesia, III. 174.
Anomala praticola, in Russia, II. 110.
Anomala solida, on vines in Italy, III. 112.
Anomala vitis, on shores of Mediterranean, II. 608; on vines in Italy, III. 112, 124, 387.
anomala, Protodiaspis.
anomalipes, Helorus.
Anomalipus, on tobacco in Rhodesia, I. 289.
Anomalon, parasite of *Feltia exclamationis* and *Euxoa segetum* in Russia, II. 212, III. 536.
Anomalon excavatum, parasite of *Dasychira pudibunda* in Holland, III. 196.
Anomalon latro, parasite of *Oria musculosa* in Russia, III. 110; parasite of *Oscinella frit* in Russia, III. 600.
Anomalon tenuicornis (see *Labrorychus*).
Anomis (*Gonitis*), I. 47.
Anomis (*Cosmophila*) *erosa*, on cotton in Africa, II. 1, 277; on cotton in the Far East, II. 491; food-plants of, in Virginia, II. 140.
Anomis (*Gonitis*) *sabulifera*, on cotton in Nyasaland, II. 277.
Anona, Hemichionaspis proxima on, in French Guiana, II. 354; *Coccus longulus* on, in Seychelles, I. 474; not attacked by termites in Natal, I. 13; *Stictococcus diversiseta* on, in Gold Coast, III. 434.
Anona muricata (Sour Sop), *Ceratitis anonae* on, in Africa, I. 97, 247; *Duomitus punctifer* on, in Barbados, II. 533, III. 73; *Chrysomphalus aonidum* on, in Egypt, II. 605; *Hilda breviceps* on, in the Philippines, III. 753; pests of, in Uganda, I. 258, II. 59, III. 288; *Xylophanes tersa* on, in Br. Guiana, I. 130.
Anona reticulata (Custard Apple), pests of, in Australia, II. 20, III. 653; *Stenoma anonella* on, in Brazil, III. 388; *Saissetia nigra* on, in the West Indies, I. 198.
anonae, Ceratitis.
anonella, Stenoma (*Antaeotricha, Phalaena, Tinea*).
Anopheles, in Astrachan, II. 717.
Anoplocnemis curvipes, on cotton, etc. in Africa, II. 2, 278; on *Hevea* in the Belgian Congo, III. 649.
Anoplognathus analis (Shining Cockchafer), on strawberries in New South Wales, III. 366.
Anoplognathus boisduvali, on sugar-cane in Queensland, III. 491.
Anosia plexippus, a beneficial insect in U.S.A., I. 84; experiments with *Chaetogaedia monticola* and, III. 711.
Anoxia australis, *Coccobacillus* infections in, I. 336.
Anoxia pilosa, on apricots, etc., in Russia, II. 110, III. 223.
Antaeotricha anonella (see *Stenoma*).
antalus, Deudorix.
antankarus, Ophion.
antennalis, Lygocerus.
antennata, Xylina.
antennatum, Melanoxantherium.
antennatus, Gomphocerus.
Antestia cruciata (Indian Coffee Bug), on coffee in the Nilgiris, II. 139.
Antestia variegata (African Coffee Bug), on coffee in East Africa, I. 104, 415; on coffee in Nigeria, II. 108; on coffee in Nyasaland, II. 278.
Antestia variegata var. *lineaticollis*, on coffee in E. Africa, II. 447, 570.
Anthaxia flavimana, on pines in N. Carolina, I. 160.
Anthaxia (*Buprestis*) *quadripuncta*, in forests in Russia, III. 217.
Anthaxia quercata, on oak in Carolina, I. 161.
Antheraea eucalypti, on apple in Australia, III. 492.
Anthocoris, III. 308; predaceous on *Chermes*, III. 598; predaceous on *Phorodon humuli* in U.S.A., I. 242; predaceous on *Rhopalosiphum ribis* in Russia, II. 81.

Anthocoris melanocerus, predaceous on Aphids in Montana, II. **536.**
Anthocoris nemorum, predaceous on Aphids and *Psylla* in Russia, I. **209**, II. **370**, III. **7.**
Anthomyia, in British Columbia, III. **507**; parasitising locusts in Russia, I. **535**, II. **53**; on sugar-beet in Norway, III. **107.**
Anthomyia antiqua (see *Hylemyia*).
Anthomyia brassicae (see *Chortophila*).
Anthomyia ceparum (see *Hylemyia antiqua*).
Anthomyia coarctata (see *Hylemyia*).
Anthomyia conformis (see *Pegomyia hyoscyami*).
Anthomyia floralis, on radishes in France, I. **257.**
Anthomyia funesta (see *Chortophila*).
Anthomyia platura (see *Chortophila*).
Anthomyia radicum, in market-gardens in Russia, III. **393.**
anthomyiae, *Aleochara.*
anthomyiarum, *Figites*; *Microgaster.*
anthonomi, *Microdontomerus.*
Anthonomus, remedies against, in Belgium, II. **501**; in orchards in Russia, III. **214**; on fruit in Switzerland, II. **605.**
Anthonomus druparum (see *A. rectirostris*).
Anthonomus grandis (Cotton Boll Weevil), in Cuba, III. **12**; bionomics and control of, in U.S.A., I. **185, 186, 264, 266**, II. **78, 266, 345, 382, 385, 389, 426, 508, 576, 582, 624, 649, 650**, III. **274, 330, 379, 424, 555, 590, 657, 685**; legislation against, in U.S.A., I. **85**, III. **120, 274, 424, 555, 657**; varieties of cotton resistant to- III. **424**; absent from South America, I. **165.**
Anthonomus grandis thurberiae, on Arizona wild cotton, II. **78, 272, 583, 624, 650**, III. **545, 691**; experiments with food-plants of, II. **582**; new parasite of, III. **691.**
Anthonomus pedicularius, on elm in France, III. **694.**
Anthonomus pomorum, on apples in Baden, II. **499**; destroyed by *Parus coeruleus* in Britain, I. **306**; bionomics and control of, in France, I. **227, 235**, II. **448**; bionomics and control of, in Russia, I. **208, 213, 357, 397, 460, 488, 491, 492, 536**, II. **42, 264, 318, 330, 337, 341, 366, 367, 374, 441, 463, 464, 614, 718**, III. **47, 50, 51, 52, 66, 105, 118, 204, 215, 224, 235, 310, 339, 392, 397, 399, 402, 440, 442, 485, 535, 539, 591, 601, 610**; in Sweden, III. **106**; Hymenopterous parasites of, II. **449.**
Anthonomus pyri, in Bessarabia, III. **225**; bionomics of, in France, II. **449.**
Anthonomus quadrigibbus (Apple Curculio), bionomics of, on apples in Canada, I. **404**, III. **358, 552.**
Anthonomus rectirostris, food-plants of, in Russia, I. **488**, III. **222, 605.**
Anthonomus rubi, on strawberries in Holland, III. **743**; food-plants of, in Russia, II. **370, 480, 720**, III. **393**; on strawberries in Sweden, III. **107, 695.**
Anthonomus signatus, on strawberries in Maine, III. **17**; on strawberries in Ontario, I. **405.**
Anthonomus suturalis (Cranberry Weevil), on cranberries in U.S.A., III. **531.**
Anthonomus ulmi (see *A. pedicularius*).
Anthonomus vestitus, on cotton in S. America, I. **164, 316**, III. **273.**
anthophilana, *Earias* (see *E. insulana*).
Anthophora, *Trichodes alvearius* in nests of, in Russia, III. **40.**
Anthores leuconotus (White Coffee Borer), on coffee in E. Africa, I. **22, 24, 104, 106, 247, 414**, II. **283, 570.**
Anthothrips aculeatus (see *Haplothrips*).
anthracina, *Serica.*
Anthrax fenestratus, parasite of locusts in Algeria, III. **428.**
Anthrax flavus (see *A. hottentotus*).
Anthrax fulvohirtus, hyperparasite of *Lachnosterna* in Hawaii, III. **681.**
Anthrax hottentotus, parasite of *Euxoa segetum* and *Oria musculosa* in Russia, I. **540**, III. **111.**
Anthrax paniscus, parasite of *Euxoa segetum* in Russia, I. **540.**
Anthrax pygarga, parasite of *Podonta nigrita*, in Russia, III. **483.**
Anthrenus lepidus, in U.S.A., III. **184.**
Anthrenus museorum, in zoological collections in Russia, III. **633.**
Anthrenus scrophulariae (Buffalo Carpet Beetle), bionomics and control of, in North America III. **184, 552, 559.**
Anthrenus verbasci, infesting zoological collections in Russia, III. **633.**
Anthribus variegatus (*varius*), enemy of *Eulecanium robinarium* in Russia, III. **542.**
Anthriscus, *Aphis anthrisci* on, in England, III. **633.**
anthurii, *Saissetia* (*Lecanium*).

Anthurium, Saissetia (*Lecanium*) *nigra* on, in Fiji, III. 548.
Anticarsia (*Thermesia*) *gemmatalis* (Bengal Bean Caterpillar), on beans, etc., in the West Indies, I. 258, 329, II. 87, III. 504; in Florida, I. 264, III. 326.
Anticyra combusta (see *Dinara*).
antigoni, Pulvinaria.
Antigonum, Ceroplastes ceriferus on, in Uganda, II. 59; *Clania variegata* on, in Ceylon, II. 597.
Antigua, pests of cotton in, I. 83, 258, 263, 329, III. 22; bionomics of *Elaphidion mite* in, I. 163; miscellaneous pests in, I. 257, 263, 390, II. 87-88, III. 22; pests of sugar-cane in, I. 154, 253, II. 140, 284, 603, 693, III. 22, 301.
Antilles, quarantine measures in, III. 555; *Stephanoderes hampei* in, I. 351; (see also under the various Islands).
Antimont, against *Phthorimaea operculella*, III. 179; ineffective as an insecticide, III. 264.
Antinonnin, III. 283.
antiopa, Vanessa (*Euvanessa*).
antiqua, Anomala; Hylemyia (*Anthomyia*); *Orgyia* (*Notolophus*); *Promecotheca; Roesselia.*
Antirrhinum (Snapdragon), *Macrosiphum antirrhinum* on, in E. Africa, II. 571; pests of, in U.S.A., III. 372, 659.
antirrhinum, Macrosiphum.
Antispila rivillei, on vines in Italy, III. 113; on vines in Russia, II. 355.
antistictica, Ceratitis stictica var.
Antithesia pruniana (see *Olethreutes*).
Antitype chi, on lettuce in France, I. 504; on Jerusalem artichoke, III. 33.
Antitype (*Polia*) *flavicincta*, on chicory and Jerusalem artichoke in France, I. 256, III. 33.
antonii, Helopeltis.
Antonina purpurea australis, unsuitable for destroying nut-grass in Queensland, III. 364.
Ants, I. 3, 241, 285, 325, 374, 379, 411, II. 14, 47, 98, 136, 149, 326, III. 203, 222, 568; associated with Aphids and Coccids, I. 125, II. 59, 393, 394, 567, 578, 628, 631; III. 92, 165; attacking raw silk, II. 549; carriers of Isle of Wight bee disease, I. 331; distributing pear blight, III. 149; eaten by birds, II. 585, III. 420; formula of poison for, III. 529; imported into U.S.A. from Holland and France, III. 355; in zoological collections in Russia, III. 633; infected with *Coccobacillus* in the Argentine, II. 462; destroying noxious insects, II. 60, 62, 141, 222, 227, 282, 525, III. 78, 88, 294, 379, 383, 425, 535; methods of controlling, I. 224, II. 73, 345, 395, 593, 615, 624, 646, 652, III. 138, 182, 330, 365, 376, 426, 486; on coca in Venezuela, II. 463; on *Manihot utilissima* in Brazil, II. 194.
Ants, Argentine (see *Iridomyrmex humilis*).
Ants, Balata (see *Azteca chartifex*).
Ants, Fire (see *Solenopsis geminata*).
Ants, Leaf-cutting (see *Atta*).
Ants, White (see Termites).
Anuraphis xanthii, sp. n., on *Xanthium* in Argentina, III. 55.
anxius, Agrilus.
Anystis agilis, destroying *Eucosma ocellana* in U.S.A., III. 259; destroying *Tetranychus telarius*, in U.S.A., III. 64.
Aonidia ferreæ, sp. n., on *Mesua ferrea* in Ceylon, III. 168.
Aonidia lauri, cyanide ineffective against, II. 482.
Aonidia oleæ, sp.n., on olives in Eritrea, II. 346.
Aonidia simplex, sp.n., in Pretoria, II. 353.
Aonidiella aurantii (see *Chrysomphalus*).
Aonidiella chrysobalani, sp. n., on *Chrysobalanus* in Senegal, II. 354.
Aonidiella inopinata, sp.n., on almond in Italy, II. 346.
Aonidiella pothi, on *Pothos scandens* and *Loranthus* in Ceylon, III. 168.
aonidum, Chrysomphalus.
Apamea didyma (see *Trachea secalis*)
Apamea (*Hydroecia*) *nictitans*, on oats, etc., in Russia, III. 203, 205, 309, 634.
Apamea testacea (see *Luperina*).
Apanteles, parasite of *Agrotis c-nigrum* in Wisconsin, III. 570; parasite of *Aporia crataegi* in Russia, III. 310; parasite of *Arctia caja* in France, I. 250, II. 362, 421; parasite of *Cirphis unipuncta* in U.S.A., III. 369, 553; parasite of *Datana* and *Hyphantria* in Connecticut, II. 187; parasite of *Evergestis extimalis* in Astrachan, II. 357; parasite of *Opogona aurisquamosa* in Hawaii, III. 682; parasite of *Parasa lepida* in

Ceylon, II. 654; parasite of *Phlyctaenodes sticticalis* in Russia, I. 535; not found parasitising *Phlyctaenodes sticticalis* in Astrachan, III. 701; parasite of *Phytometra californica* in Montana, III. 457; parasitised by *Pleurotropis neavei* in E. Africa, III. 444; parasite of *Polychrosis viteana* in U.S.A. I. 113; parasite of *Schizura concinna* in California, I. 426, II. 663; parasite of *Sylepta derogata* in Nigeria, III. 444.

Apanteles bordagei, parasite of *Leucoptera coffeella* and *Gracilaria coffeifoliella* in Réunion, II. 216.

Apanteles caja, parasite of *Arctia caja* in France, I. 419.

Apanteles carpatus, parasite of clothes-moths, III. 509.

Apanteles congestus, parasite of *Abraxas grossulariata* in France, II. 622.

Apanteles congregatus, parasite of *Agrotis unicolor* in U.S.A., III. 371; parasite of *Phlegethontius* spp. in U.S.A., I. 54, III. 268.

Apanteles (*Protapanteles*) *flaviconchae*, parasite of *Colias eurytheme* in U.S.A., III. 153.

Apanteles fulvipes, parasite of *Lymantria dispar* in France and Russia, I. 362, 481, 492, II. 334.

Apanteles fumiferanae, parasite of *Tortrix fumiferana* in Maine, I. 202.

Apanteles gagates, parasite of *Abraxas grossulariata* in France, II. 622.

Apanteles glomeratus, parasite of *Lymantria dispar* in Russia, I. 481; parasite of *Pieris brassicae* and other cabbage pests in Europe and U.S.A., I. 208, II. 356, 588, 665, III. 16, 46, 178, 204, 277, 738.

Apanteles harnedi, parasite of *Cirphis* spp. in Texas, III. 684.

Apanteles lacteicolor, parasite of gipsy and brown-tail moths in U.S.A., II. 136, 187, 295, 343, 394, 710, 711, III. 63, 329, 330, 507.

Apanteles lateralis, parasite of *Galleria mellonella* in Europe, I. 454, II. 379.

Apanteles melanoscelis, parasite of gipsy and brown-tail moths in U.S.A., III. 330.

Apanteles militaris, parasite of cutworms in U.S.A., III. 371, 553, 684.

Apanteles phobetri, sp.n., parasite of *Phobetron pithecium* in U.S.A., III. 658.

Apanteles ruficrus, parasite of *Phlyctaenodes sticticalis* in Russia, I. 535, III. 220.

Apanteles rufocoxalis, parasite of *Cirphis* spp. in Texas, III. 684.

Apanteles sibinidis, sp.n., parasite of *Sibine stimulea* in U.S.A., III. 658.

Apanteles solitarius, parasite of *Lymantria dispar* in Russia, I. 362, 481, II. 334.

Apanteles spurius, parasite of *Aporia crataegi* in Russia, III. 204.

Apanteles vanessae, parasite of *Phlyctaenodes sticticalis* in Russia, I. 362.

Apanteles viminetorum, parasite of *Euproctis chrysorrhoea* in France, I. 270.

Apantelicus kotinskyi, imported into Hawaii, III. 757.

Apantesis arge (Grape Tiger Moth), on vines in U.S.A., III. 181.

Apate bimaculata (see *Schistoceros*).

Apate capucina (see *Bostrychus*).

Apate francisca, in Porto Rico, III. 517.

Apate indistincta, on coffee, etc., in E. Africa, I. 247, II. 591, III. 751.

Apate monacha, I. 389; on coffee in E. Africa, II. 570, 591, III. 751; on cotton in Africa, I. 349, II. 1, 579; on *Kicksia elastica* in Africa, II. 415; distribution of, II. 196; on vines in Algeria, II. 196.

Apate muricata (see *Sinoxylon perforans*).

Apate sexdentata (see *Sinoxylon*).

Apate sinuata (see *Xylonites retusus*).

Aphaereta, parasite of *Sarcophaga* in U.S.A., III. 82.

Aphaereta sarcophagae, parasite of *Sarcophaga kellyi* in Kansas, III. 151.

Aphalara, II. 601.

Aphalara calthae, on pines in U.S.A., III. 567.

Aphanogmus floridanus, parasite of *Arthrocnodax carolina* in U.S.A., II. 704.

Aphanurus bodkini, parasite of *Empicoris variolosus* in British Guiana, II. 497, 520.

Aphanurus (*Telenomus*) *eurydemae*, hosts of, in Russia, II. 358, III. 220, 439; parasitised by *Encyrtus telenomicida* in Russia, II. 358, III. 220.

Aphanurus semistriatus (see *Telenomus*).

Aphanurus vassilievi (see *Telenomus*).

Aphanus pini, in forests in Russia, III. 7.
Aphelenchus fragariae, on strawberries in England, II. 563; on strawberries in Sweden, III. 695.
Aphelenchus olesistus, on chrysanthemums and ferns in Russia, II. 424; on chrysanthemums in Britain, III. 747.
Aphelenchus ormerodis, on *Lobelia cardinalis* in Holland, III. 740.
Aphelenchus ritzema-bosi, on chrysanthemums in Holland, III. 740; on chrysanthemums in Britain, III. 747.
Aphelinoidea semifuscipennis var. *albipes*, n., parasite of leaf-hoppers in Porto Rico, III. 26.
Aphelinus, European species of, I. 549; parasite of Coccids and Aleurodids in Chile, I. 350; parasite of scale-insects, III. 131, 143, 357.
Aphelinus brachyptera, I. 550.
Aphelinus capitis, sp. n., parasite of scale-insects in U.S.A., III. 357.
Aphelinus chrysomphali, parasite of *Chrysomphalus dictyospermi*, III. 590.
Aphelinus daucicola, I. 550.
Aphelinus diaspidis, parasite of scale-insects in U.S.A., II. 384, III. 143; imported into Hawaii, III. 757.
Aphelinus dubius, I. 550.
Aphelinus erythraeus, sp. n., parasite of *Aspidiotus oppugnatus* in Eritrea, III. 433.
Aphelinus flaviventris, I. 550.
Aphelinus fuscipennis, in Peru, I. 323; parasite of scale-insects in U.S.A., II. 117, 165, 217, 384; III. 192, 417, 473.
Aphelinus hordei, parasite of *Brachycolus noxius* in Russia, III. 308.
Aphelinus limonus, sp. n., parasite of *Hemichionaspis minor* in Hawaii, III. 357.
Aphelinus mytilaspidis, parasite of scale-insects, II. 165, 217, III. 417, 675.
Aphelinus quaylei, sp. n., parasite of scale-insects in Peru, I. 323, III. 357.
Aphelinus scutellaris, parasite of *Eulecanium robinarium* in Russia, III. 542.
Aphelinus subflavescens, I. 550.
Aphelopus, parasite of *Typhlocyba comes* in U.S.A., II. 282.
Aphelosetia (*Elachista*) *bedellella*, on oats in France, III. 428.
Aphelosetia pollinariella, on oats in France, III. 428.
Aphelosetia pullicomella, on oats in France, III. 428.
Aphelosetia truncatella, on oats in France, III. 428.
Aphidencyrtus aspidioti, sp. n., parasite of *Aspidiotus perniciosus* in U.S.A., III. 724.
Aphidencyrtus aspidioti var. *britannicus*, n., parasite of *Lepidosaphes ulmi* in Britain, III. 675.
Aphidius, parasite of *Aphis rumicis* (*euonymi*) in France, II. 620; parasite of cotton pests in Russia, II. 312; parasite of *Toxoptera graminum* in S. Africa, II. 153, 154.
Aphidius avenae, parasite of Aphids in France, III. 112.
Aphidius brassicae, parasite of *Aphis brassicae* in Russia, II. 358, III. 220.
Aphidius cardui (see *Lysiphlebus*).
Aphidius chilensis, parasite of rose aphis in Chile, I. 350.
Aphidius crepidis, parasite of Aphids, II. 696; parasite of *Aphis rumicis* (*euonymi*) in France, II. 620.
Aphidius ervi, parasite of *Acyrthosiphon pisi* in Russia, III. 704.
Aphidius nigriceps, parasite of *Aphis avenae* in U.S.A., II. 697.
Aphidius (*Diaeretus*) *rapae*, parasite of Aphids in Hawaii, III. 363.
Aphidius ribis (see *Lysiphlebus*).
Aphidius testaceipes, (see *Lysiphlebus*).
Aphidius tritici (see *Lysiphlebus testaceipes*).
Aphidius urticae, parasite of *Aphis rumicis* (*euonymi*) in France, II. 620.
aphidivorus, *Encyrtus*.
Aphidoletes, destroying Aphids, II. 312, 697, III. 115, 134.
Aphidoletes carnifex, parasite of Aphids in Russia, III. 220.
Aphiochaeta (*Phora*) *fasciata*, parasite of Coccinellids in Sicily, II. 150, III. 431.
Aphiochaeta perdita, parasite of *Colias eurytheme* in the U.S.A., III. 153.
Aphids, classification of, I. 33, 77, 139, 274, 467, II. 11, 79, 80, 81, 82, 208, 251, 271, 276, 406, 510, 571, 604, 634, 658, III. 54, 55, 588, 633, 749, 762; natural enemies of, I. 26, 39, 98, 120, 185, 242, 247, 249, 258, 306, 350, 364, 392, 457, 511, 549, II. 43, 49, 79, 81, 86, 91, 107, 150, 154, 162, 314, 358, 376, 396, 420, 436, 514, 527, 536, 563, 575, 579, 581, 592,

619, 620, 631, 696, 720, III. 45, 90, 112, 115, 132, 134, 142, 164, 169, 206, 211, 220, 308, 363, 405, 473, 481, 570, 598, 660, 674, 704, 760; on cotton in Zanzibar, III. 125; on millet in Russia, III. 45; remedies against, I. 159, 375, 471, 548, II. 22, 158, 173, 210, 259, 292, 358, 387, 394, 410, 447, 459, 481, 514, 562, 581, 598, 613, 615, 652, 673, 688, 696, 698, III. 122, 139, 391, 395, 426, 464, 485, 505, 529, 540, 554, 563, 612, 620, 762.

Aphis abietina (Green Spruce Aphis), bionomics and control of, in Britain, II. 271, 619; food-plants of, in Holland, III. 743.

Aphis adjecta, on *Cynoglossum officinale* in England, III. 633.

Aphis affinis var. *gardeniae*, n., on *Gardenia radicans* in Argentina, III. 55.

Aphis africana, sp. n., on sorghum and barley in B. E. Africa, II. 276, 571.

Aphis allii, on onions and garlic in Russia, III. 544.

Aphis ampelophila, sp. n., on vines in Argentina, III. 55.

Aphis amygdali, control of, in Australia, III. 25, 78; on peaches and apricots in England, I. 433; on almond in Spain, III. 276.

Aphis apposita, on *Senecio vulgaris* in Britain, III. 762.

Aphis atriplicis (see *A. rumicis*).

Aphis (*Hyadaphis*, *Siphocoryne*) *avenae* (Barley Aphis, European Grain Aphis), bionomics and control of, in Canada and U.S.A., I. 405, 512, II. 246, 288, 491, 677, 696, III. 348, 415, 423, 464, 511; disseminating fire blight, II. 288; migrations of, in Britain, III. 9; in Denmark, III. 246, 698; on oats in France, III. 428; on grasses in Italy, III. 54; on grain crops in Russia, I. 460, II. 171; on cereals, etc., in Norway and Sweden, III. 107, 697.

Aphis bakeri (Short-beaked Clover Aphis), food-plants of, in U.S.A., II. 251, 553, III. 352, 375.

Aphis bituberculata, sp. n., on *Saccharum officinarum* in New Orleans, II. 658.

Aphis brassicae (Cabbage Aphis), in Africa, II. 236, 276, 278, III. 618; in the British Isles, I. 434, II. 655; bionomics and control of, in Canada and U.S.A., I. 180, II. 5, 161, 188, 492, 536, 665, III. 132, 192, 335, 471, 511; in Denmark, III. 247, 698; on radishes in France, I. 257; in Hawaii, III. 363; in Japan, I. 520; bionomics and control of, in Russia, II. 43, 355, 358, 480, 488, 614, III. 45, 51, 220, 227, 311, 399, 401, 443, 606, 610.

Aphis brevis (Long-beaked Clover Aphis), food-plants of, in U.S.A., III. 375, 423.

Aphis brevisiphona, sp. n., in England, I. 78.

Aphis callunae, sp. n., on *Calluna vulgaris* in Britain, III. 762.

Aphis camellicola, sp. n., on camellias in Argentina, III. 55.

Aphis capreae, on parsnips in France, I. 504.

Aphis capsellae, food-plants of, in Russia, III. 704.

Aphis cardui, synonymy and bionomics of, II. 79, 81; on plums in France, II. 539; bionomics of, in Germany, I. 295, II. 406; on plums in Russia, III. 214, 609, 610; on plums in U.S.A., III. 423; food-plants of, in Britain, III. 278, 633, 762; on plums in Italy, III. 124.

Aphis carsellae (see *A. cardui*).

Aphis cerasi, on cherries in France, II. 539; in Oregon, III. 272; on blackberries in Poland, III. 609.

Aphis cerasifoliae, on *Prunus virginiana* in Maine, III. 423.

Aphis cerasina, on *Prunus* in Russia, II. 79.

Aphis cerealis (see *Macrosiphum granarium*).

Aphis chaerophylli, on *Chaerophyllum tuberosum* in Britain, III. 762.

Aphis chenopodii, I. 77.

Aphis chrysanthemi (see *A. cardui*).

Aphis cichorii, on chicory, I. 256.

Aphis citri, on citrus in Uganda, I. 49.

Aphis coffeae (Black Coffee Aphis), on coffee in E. Africa, I. 107, 415.

Aphis compositae, sp. n., on Compositae in E. Africa, III. 749.

Aphis craccae, on *Ervum* in Russia, III. 704.

Aphis crataegi, food-plants of, in Britain, III. 762; bionomics of, in Russia, II. 79, 80, 339, III. 220, 399.

Aphis cucumeris (see *A. gossypii*).

Aphis cucurbiti (see *A. gossypii*).

Aphis cynarae, sp. n., on *Cynara* in Egypt, III. 749.

Aphis dirhodum, on roses, III. 748.

Aphis erysimi, on radishes in France, I. 257.

Aphis euonymi (see *A. rumicis*).

Aphis euonymi-papaveris (see *A. rumicis*).
Aphis fitchii (Migratory Apple Aphis), in Ireland, II. 655; on *Pyrus* in Russia, II. 79.
Aphis frigidae, on *Artemisia californica* in California, II. 251.
Aphis forbesi (Strawberry Aphis), in U.S.A., I. 266, III. 192, 425, 515; parasitised by *Lysiphlebus testaceipes*, III. 516.
Aphis furcata, on *Prunus virginiana* in Maine, III. 423.
Aphis fuscifrons, on oats in France, III. 428.
Aphis galii, on *Galium cruciata* in England, III. 633.
Aphis gossypii (Cotton Aphis, Melon Aphis), bionomics of, in Africa, I. 123, II. 2, 107, 278, 571, 592, III. 164; on prickly pear in Australia, III. 127; *Hippodamia convergens* imported into California against, III. 494; in Costa Rica, I. 341; on maize in Egypt, III. 749; control of, in Russia, I. 460, 487, II. 33, 198, 312, 488, 716, III. 45, 220, 227, 399, 401; synonymy of, II. 467, 564; on cotton in Uganda, I. 49; bionomics and control of, in U.S.A., I. 180, 204, 418, II. 204, 246, III. 132, 192, 465, 471, 494, 511, 512, 688, 761; in the West Indies, II. 87, III. 412, 476.
Aphis grossulariae, bionomics of, in Russia, II. 79, 81; on gooseberries and currants in England, I. 237; on gooseberries and currants in Germany, II. 406, 500; on gooseberries and currants in Maine, II. 510; on black currants in Russia, I. 460.
Aphis hederae, migrations of, in Germany, III. 607, 608.
Aphis hederella, sp. n., on *Hedera helix* in Cape Town, III. 749.
Aphis helichrysi, on *Achillea millefolium* in England, III. 633.
Aphis hermistoni, in Oregon, III. 588.
Aphis hordei, sp. n., on *Hordeum murinum* in Italy, III. 54.
Aphis hougtonensis, on wild currant in California, II. 251.
Aphis idaei, on raspberry in Russia, II. 79, 82, 370, III. 45, 220, 399, 543.
Aphis illata (see *A. gossypii*).
Aphis infuscata, on *Prunus spinosus* in England, III. 633.
Aphis intibi, on chicory, I. 256.
Aphis jacobeae (see *A. cardui*).
Aphis laburni, on *Robinia* in Egypt, III. 749; food-plants of, in Russia, I. 461, III. 45, 399.
Aphis lactucae, on lettuce in France, I. 504.
Aphis lappae, on Jerusalem artichoke, III. 33.
Aphis leguminosae, sp. n., food-plants of, in Africa, III. 749.
Aphis ligustriella, sp. n., on privet in Pretoria, II. 276.
Aphis lithospermi, sp. n., on *Lithospermum pilosum* in Oregon, III. 588.
Aphis maidiradicis (Corn-root Aphis, Cotton-root Aphis), bionomics of, in Canada and U.S.A., I. 124, II. 392, 491, III. 425, 541; on Graminaceae in Italy, III. 54,
Aphis maidis, on maize, &c., in Australia, Japan and U.S.A., II. 396; on maize, &c., in Africa, II. 273, 630, 631; on wheat in Egypt, III. 749; on Graminaceae in Italy, III. 54; on maize in U.S.A., III. 541.
Aphis mali (see *A. pomi*).
Aphis malvae (see *A. gossypii*).
Aphis medicaginis, on *Medicago* in Egypt, III. 749; on lucerne in Europe, I. 527.
Aphis mordvilkiana, sp. n., bionomics of, in Russia, II. 79, 82.
Aphis nerii, on oleander in California, III. 275; on oleander in the Transvaal, III. 749.
Aphis nigripes, sp. n., on willow in Pretoria, II. 276.
Aphis nymphaeae (see *Rhopalosiphum*).
Aphis ochropis (Teasel Aphis), food-plants of, I. 78.
Aphis onobrychis (see *Acyrthosiphon pisi*).
Aphis ononidis, food-plants of, in India, III. 114.
Aphis oregonensis, in Oregon, III. 588.
Aphis padi, on apples in Holland, I. 386; on grain in Russia, I. 460, II. 171, III. 541.
Aphis papaveris (see *A. rumicis*).
Aphis parvus, on chrysanthemums in Egypt, III. 749.
Aphis persicae, on peaches in Argentina, II. 207; bionomics and control of, in S. Africa, II. 47, 48, III. 503; on peaches in France, II. 539; on apricots and peaches in Germany, II. 500; on *Prunus*, etc., in Russia, II. 79, III. 182; world-wide distribution of, II. 276.
Aphis persicae-niger (Black Peach Aphis), declared a pest in British Columbia, I. 48; intercepted on peach in California, III. 494, 626; on peaches in U.S.A., I. 283, III. 180, 192, 420.

Aphis pieridis, on chicory, I. 256.
Aphis pisi (see *Acyrthosiphon*).
Aphis pomi (*mali*) (Green Apple Aphis), confused with *Aphis fitchii* in Ireland, II. 655; in Belgium, II. 177; declared a pest in British Columbia, I. 48; bionomics and control of, in Canada and U.S.A., I. 83, 90, 280, 400, 403, 413, 451, 452, 512, II. 22, 288, 434, 491, 536, 675, 677, 710, III. 68, 69, 72, 192, 274, 275, 335, 373, 407, 415, 423, 464, 515, 557, 692; in France, II. 539; effect of meteorological conditions on, in Germany, II. 500; in Ireland, II. 8; control of, in Italy, I. 161; on fruit in Japan, I. 520; in Rumania, III. 345; control of, in Russia, I. 460, II. 35, 79, 264, 281, 366, 374, 700, 715, 718, III. 20, 45, 51, 220, 224, 226, 311, 392, 398, 401, 442, 481, 601, 606, 609, 610, 641; concerned in dissemination of fire-blight in U.S.A., II. 288.
Aphis populifoliae, on willows in Maine, I. 467.
Aphis pruni (see *A. cardui*).
Aphis prunicola, on *Prunus* in Russia, II. 79.
Aphis prunifoliae (Prune Aphis), bionomics and control of, in Canada and U.S.A., I. 282, 384, III. 68, 122.
Aphis prunina, on *Prunus* in Russia, II. 79.
Aphis prunorum (see *Rhopalosiphum nymphaeae*).
Aphis pseudobrassicae, sp. n., II. 604.
Aphis pseudocardui, sp. n., on *Carduus* in the Transvaal, III. 749.
Aphis punicella, sp. n., on pomegranate in Egypt, III. 749
Aphis pyri, on apple in Germany, II. 406; on pears, etc., in Russia, II. 79, 715, III. 220, 223, 226, 399; Koch's sp. distinct from that of Boyer, II. 406.
Aphis radicans, on beans in Russia, II. 502.
Aphis radicum, on artichokes in Brittany, II. 606; on chicory, I. 256.
Aphis ranunculi (see *A. crataegi*).
Aphis reticulata, on *Artemisia* in Oregon, III. 588.
Aphis ribis, in orchards in Russia, II. 44, III. 393.
Aphis rosae, in Germany, II. 501; on roses in Russia, II. 719.
Aphis rubiphila, on wild raspberry in Maine, III. 424.
Aphis rumicis (Black Aphis, Black Beetroot Aphis, Black Fly, Mangel Black Fly), distribution and bionomics of, I. 77, II. 17, 236; synonymy of, II. 467; on sugar-beet in Belgium, II. 177; on *Chenopodium* spp. in California, II. 251, III. 738; food-plants of, in Denmark, III. 246, 526, 698; food-plants of, in Egypt, III. 749; bionomics and control of, in England, II. 563, 660, 661, III. 676; bionomics of, in France, I. 124, 172, 188, 227, 504, II. 89, 270, 420, 428, 451, 478, 606, 620, III. 33; plants attacked by, in Germany, II. 406, 494, 500; in East Africa, I. 415; on vegetables in Japan, I. 520; on beet, etc., in Russia, I. 460, 487, II. 171, III. 9, 45, 394, 481, 542, 610.
Aphis sacchari (Sugar-cane Leaf Aphis), on sugar-cane in Java, III. 318; on sugar-cane in Mauritius, I. 31, II. 46, 612.
Aphis saliceti, on willows in England, III. 660.
Aphis salicicola, on willows in Maine, I. 467.
Aphis sambuci, III. 55.
Aphis sanborni, sp. n., on gooseberries in Maine, II. 510.
Aphis scabiosae, in England, III. 633.
Aphis sedi, on *Sedum acre* in England, III. 633.
Aphis setariae, bionomics of, on sugar-cane in Porto Rico, III. 134, 674; migrations of, III. 351.
Aphis solanella, sp. n., in B. E. Africa, II. 276, 571.
Aphis sonchi, on lettuce in France, I. 504.
Aphis sorbi (Rosy Aphis, Purple Apple Aphis), parasitised by *Aphidius chilensis* in Chile, I. 350; bionomics and control of in Canada and U.S.A., I. 280, 404, 413, 512, II. 32, 491, 675, 677, III. 121, 274, 415, 423, 464, 570, 734; bionomics of, in Russia, II. 79, 80, 264, III. 311, 541, 606; in France, I. 271; on apples in Britain, II. 8, 271.
Aphis sorghella (see *A. sorghi*).
Aphis sorghi (Asal Fly, Millet Aphis), bionomics and control of, on maize in Africa, I. 415, II. 2, 273, 345, 396, 581, 588, 630; on maize in Russia, III. 541.
Aphis spiraecola, on *Spiraea* in Maine, III. 424.

Aphis spiraephila, on *Spiraea* in Maine, III. 424.
Aphis symphyti (see *A. cardui*).
Aphis tavaresi (Black Citrus Aphis), on citrus in Africa, II. 571, III. 749.
Aphis tiliae, on limes in Russia, III. 226.
Aphis tridentatae, on *Artemisia* in Oregon, III. 588.
Aphis tuberculata, on *Prunus serotina* in Maine, III. 423.
Aphis tulipae, on tulips in Holland, III. 200.
Aphis ulmariae, distinct from *Acyrthosiphon pisi*, III. 702; on peas and lentils in Russia, III. 51.
Aphis urticaria, food-plants of, in England, III. 633; on *Rubus* in Russia, II. 79.
Aphis varians, sp. n., in Maine, II. 510.
Aphis viburni (Snowball Aphis), Coccinellids preying on, in U.S.A., I. 512, III. 132.
Aphis viciae, in Italy, III. 54.
Aphis vulpiae, sp. n., on *Vulpia* in Italy, III. 54.
Aphis zeae, on maize in North America, III. 541.
Aphis, Green Mangold (see *Rhopalosiphum betae*).
Aphis, Green Peach (see *Myzus persicae*).
Aphis, Hop (see *Phorodon humuli*).
Aphloia theaeformis, *Ceroplastes vinsoni* on, in Reunion, II. 216.
Aphodius, parasitised by *Tiphia femorata* in Russia, II. 260.
Aphodius subterraneus, larva of, II. 110.
Aphomia sociella, destroying bees in England, II. 564.
Aphrasthasia pectinatae (see *Chermes*).
Aphrastobracon flavipennis, hyperparasite of *Tachardia albizziae* in India, I. 275.
Aphrophora alni, on chrysanthemums in Britain, III. 474; on chrysanthemums in France, II. 131; on chrysanthemums in Russia, II. 425.
Aphrophora spumaria, on strawberries in Russia, III. 393; on vines in Sicily, III. 112.
Aphthona, on cotton in Africa, II. 1.
Aphthona euphorbiae, on linseed and mustard in Russia, III. 47, 222.
Aphthona lutescens, food-plants of, in Holland, III. 742.
Aphycus, parasite of Coccids in California, I. 309, III. 457; parasite of *Pulvinaria iceryi* in Mauritius, III. 160.
Aphycus praevidens, sp. n., parasite of *Philippia chrysophyllae* in Eritrea, III. 432.
Aphycus terryi, sp. n., parasite of *Pseudococcus saccharifolia* in Hawaii, II. 20.
apiarius, *Trichodes*.
apicalis, *Calidea*; *Nephotettix*; *Nupserha*.
apicata, *Ctenophora*.
apicella, *Depressaria*.
apiforme, *Trochilium*.
apii, *Alysia*.
Apiomerus crassipes, predaceous on *Monocrepidius vespertinus* in S. Carolina, III. 710.
Apion, parasitised by *Bracon colpophorus*, II. 426; on *Hevea* in the Belgian Congo, III. 649; bionomics of, in Russia, II. 198, III. 112, 203, 205, 641.
Apion æstivum, on lucerne in France, II. 577; bionomics of, in Russia, III. 634.
Apion africanus, in clover seed in Italy, II. 687.
Apion apricans, on clover in Denmark, III. 247, 699; on clover in France, I. 227, II. 420; on clover, etc., in Russia, I. 216, 483, II. 43, 370, III. 223, 227, 402, 481, 634; on clover in Sweden, II. 340, III. 107; on clover in Tuscany, III. 524.
Apion armipes (Cotton Stem Weevil), on cotton in Africa, I. 246, 272, II. 1, 277, 580.
Apion basicorne, on artichokes, III. 33.
Apion carduorum, on artichokes in France, I. 227.
Apion craccae, on lentils, I. 123; on vetches in Russia, III. 205.
Apion cubicolle, on olives in California, III. 151.
Apion ervi, on lentils, I. 123.
Apion flavipes, bionomics of, in Russia, III. 634, 635.
Apion frumentarium, bionomics of, in Russia, III. 634, 635.
Apion fuliginosum, on cowpeas in Africa, I. 414.
Apion pisi, on clover in Denmark, III. 247; on lucerne in Europe, I. 527; on lucerne, etc., in France, II. 577; in market-gardens in Russia, III. 393.
Apion pomonae, in orchards in Russia, I. 460, III. 106.
Apion seniculus, bionomics of, in Russia, III. 634, 635.

Apion trifolii (see *A. aestivum*).
Apion ulicis, imported into U.S.A. from England on *Ulex europea*, III. 117, 354.
Apion varipes, bionomics of, in Russia, III. 634, 635.
Apion varium, on cowpeas in Africa, I. 414.
Apion varium var. *vicinum*, on *Vigna sinensis* in Africa, I. 247, II. 283.
Apion viciae, on lentils, I. 123; bionomics of, in Russia, III. 634, 635.
Apion violaceum, on clover in Russia, II. 340.
Apion virens, on clover in Italy, III. 524.
Apion vorax, on lentils, I. 123.
Apion xanthostylum, on cotton in Africa, I. 246, 414, 545, II. 1, 2, 283, 579.
apiphila, Arthrocnodax.
Apis florea, Nosema bombi pathogenic to, III. 169.
Apis mellifera (see Bees).
apis, Nosema.
Apium graveolens, Acidia heraclei on, in France, III. 188.
aplanatus, Xyleborus.
Aplastomorpha pratti, parasite of *Lasioderma serricorne* in British Guiana. II. 520.
Aplecta nebulosa (see *Polia*).
Aplectoides speciosa (Yellow-headed Cutworm), in Canada, II. 24.
Apocellus sphaericollis (Violet Rove Beetle), bionomics and control of, in U.S.A., III. 549.
Apocheima (*Biston*)*pomonaria*, remedies against, in Russia, II. 522.
Apoderus (*Attelabus*) *coryli*, on *Corylus* in Russia, II. 672.
Apoderus sissu, sp. n., on *Dalbergia sissoo* in Bengal, I. 119.
Apogonia comosa, on citrus in Ceylon, II. 644, 652.
Apomecyna binubila (Pumpkin Stem Borer), in Natal, III. 60.
Apomecyna neglecta, on pumpkins in Hawaii, III. 29.
Apomecyna parumpunctata, on yams in S. Nigeria, II. 108.
Apomecyna pertigera (see *A. neglecta*).
Apopestes spectrum, parasitised by *Trichogramma semblidis* in Russia, I. 432.
Aporia crataegi, bionomics and control of, in Russia, I. 206, 208, 491, 492, 493, 494, 496, 498, II. 36, 42, 263, 298, 319, 341, 366, 428, 442, 463, 468, 712, III. 21, 27, 50, 51, 52, 105, 204, 221, 224, 238, 310, 392, 397, 398, 400, 403, 481, 482, 485, 540, 601, 607; on almond in Spain, III. 276.
appendiculata, Elimaea; *Pristiphora* (*Nematus*) (see *P. pallipes*).
appendiculatus, Gymnonychus.
Apple (*Pyrus malus*), pests of, in S. Africa, I. 13, 196, 466, III. 502; legislation against importation of, into E. Africa, II. 570; regulations regarding removal of, in S. Africa, II. 84; pests of, and their control in Australia, I. 195, 513, II. 18, 493, 511, 584, 652, III. 25, 408, 491, 527; *Papilio feisthameli* on, in Barbary, III. 427; pests of, and their control in the British Isles, I. 236, 237, 245, 388, 433, II. 8, 271, 562, 563, 628, 655, 658, 659, III. 9, 74, 80, 277, 280, 346, 659, 718, 762; pests of, and their control in Canada, I. 84, 85, 87, 90, 91, 400, 401, 403, 404, 405, 406, 413, 432, II. 94, 490, 492, 665, 675, 676, 677, III. 68, 71, 72, 73, 358, 407, 516, 552, 554, 619, 678; pests of, and their control in France, I. 167, 227, II. 166, 195, 401, 448, 449, 478, 501, 637, 696, III. 11; pests of, in Germany II. 152, 406, 499, 500; pests of, in Holland, I. 386, II. 177, III. 198, 742; pests of, in Italy, III. 54, 124, 143; pests of, in Norway III. 107; *Zeuzera pyrina* on, in Portugal, I. 313; varieties of, resistant to *Eriosoma lanigerum* in S. Rhodesia, II. 163; *Hyponomeuta malinellus* on, in Rumania, III. 344; pests of, and their control in Russia, I. 206, 207, 208, 209, 346, 358, 365, 368, 370, 437, 438, 439, 460, 488, 489, 491, 493, 536, 539, II. 35, 42, 51, 79, 198, 200, 261, 275, 291, 298, 318, 330, 331, 334, 337, 341, 342, 367, 368, 369, 370, 374, 419, 464, 467, 482, 523, 524, 614, 636, 640, 692, 700, 701, 712, 714, 715, 718, III. 34, 43, 44–47, 49, 50, 51, 76, 81, 106, 108, 130, 172, 204, 219, 224, 310, 311, 339, 395, 402, 438, 442, 484, 533–535, 591, 601, 606, 609, 639; pests of, in Sweden, III. 250, 253; pests of, and their control in U.S.A., I. 24, 54, 93, 100, 133, 134, 140, 141, 153, 154, 182, 183, 203, 225, 280, 290, 322, 325, 332, 381, 384, 418, 426, 427, 430, 475, II. 3, 14, 113, 117, 135, 188, 193, 217, 287, 288, 294, 358, 359, 361, 365, 380, 394, 438, 457, 458, 484, 485, 491, 529, 536, 537, 553, 599, 600, 601, 638, 674, 696, 697, III. 3, 15, 52, 57, 115, 139, 161, 179, 192, 194, 257, 258, 261, 268, 270, 272, 275, 294, 351, 359, 362, 373, 375, 380, 413, 415, 417, 423, 447,

456, 461, 464, 465, 472, 493, 494, 508, 511, 515, 545, 558, 566, 586, 588, 619, 654, 669, 671, 685, 687, 708, 725, 733, 758; pests imported into U.S.A. on, III. **469, 626**; pests of, in Uruguay, II. **162**; methods of packing, II. **181**; spraying and other remedies against pests of, I. **196, 209, 226, 276, 347, 366, 381, 425, 433, 474,** II. **190, 358, 359, 501, 618, 673, 696, 709,** III. **294, 301, 395, 464, 529, 554, 619, 708.**

Apple Aphis (see *Aphis pomi*).

Apple Bugs (see *Heterocordylus malinus* and *Lygidea mendax*).

Apple Canker (see *Nectria ditissima*).

Apple Caterpillar, Red-humped (see *Schizura concinna*).

Apple Caterpillar, Yellow-necked (see *Datana ministra*).

Apple, China, *Zeuzera coffeae* on, in Ceylon, II. **151.**

Apple, Crab (see Crab Apple).

Apple Curculio (see *Anthonomus quadrigibbus*).

Apple, Custard, *Saissetia nigra* on, I. **198.**

Apple Ermine Moths (see *Hyponomeuta malinellus* and *H. padellus*).

Apple Flea Weevil (see *Rhynchaenus canus*).

Apple Fruit-fly (see *Rhagoletis pomonella*).

Apple Fruit-miner (see *Argyresthia conjugella*).

Apple Leaf-folder, Lesser (see *Teras minuta*).

Apple Leaf-hopper (see *Empoasca mali*).

Apple Leaf-miner Moth (see *Lyonetia clerkella*).

Apple Leaf-roller (see *Cacoecia argyrospila*).

Apple Maggot (see *Rhagoletis pomonella*).

Apple, Malay Rose (see *Eugenia malaccensis*).

Apple Mussel Scale (see *Lepidosaphes ulmi*).

Apple Root-borer (see *Agrilus vittaticollis* and *Leptops*).

Apple Scab, II. **359, 536, 709,** III. **295.**

Apple Sucker (see *Psylla mali*).

Apple, Thorn, not resistant to gipsy moth in U.S.A., II. **711.**

Apple Tree Borers (see *Saperda candida* and *Chrysobothris femorata*).

Apple Tree Shot Borer (see *Xyleborus dispar*).

Apple Tree Tent Caterpillar (see *Malacosoma americana*).

Apple, Wild, elimination of, against brown-tail and gipsy moths, I. **149,** II. **295**; *Lygus invitus* on, in U.S.A., II. **134.**

Apple Worm (see *Cydia pomonella* and *Graptolitha bethunei*).

Apple Worm, Lesser (see *Enarmonia prunivora*).

apposita, Aphis.

approximatus, Tarsonemus.

aprica brenskei, Anisoplia.

apricans, Apion; *Buprestis.*

apricaria, Amara; *Chaetocnema.*

Apricot (*Prunus armeniaca*), pests of, in S. Africa, I. **13, 196, 466**; pests of, in Algeria, III. **639**; pests of, in Australia, I. **195,** II. **119,** III. **80**; pests of, in Britain, III. **199**; pests of, in Canada, I. **85,** II. **23**; *Rhopalosiphum dianthi* on, in Egypt, III. **749**; pests of, in France, II. **402, 449,** III. **694**; pests of, in Germany, II. **486, 500**; pests of, in Russia, I. **368, 437, 440, 536,** II. **51, 80, 81, 337, 348, 419, 524, 636, 715,** III. **35, 43, 45, 49, 220, 223, 224, 533–535, 727**; pests of, in U.S.A., I. **134, 385, 404, 418, 426,** II. **113, 116, 244, 286, 300, 390, 431, 432, 438, 439, 599, 706, 707,** III. **85, 140, 493, 558, 738**; effects of insecticides on, II. **286,** III. **556.**

Apricot Scale, parasitised by *Comys fusca*, II. **599.**

Apriona flavescens, on *Castilloa* and *Ficus* in Java, II. **535.**

Apriona rugicollis, on mulberry in Japan, I. **520.**

Apterite, use of, as an insecticide in Australia and New Zealand, I. **194,** II. **19.**

Apterona crenulilla (*Psyche helix*), in Russia, III. **393.**

Apterotrix longiclava, sp. n., parasite of *Lepidosaphes ulmi* in Britain, III. **675.**

apterum, Philachyra.

apterus, Lethrus; *Pyrrhocoris.*

Aptinothrips rufus, on clover in Denmark, III. **699.**

aquifolii, Phytomyza.

Aquila, destroying *Locusta migratoria* in Russia, III. **603.**

Aquilegia, Phytomyza aquilegiae on, in U.S.A., III. **709**; *Pseudococcus oamaruensis*, sp. n. on, in New Zealand, III. **721.**

aquilegiae, Phytomyza.

aquilina, Euxoa tritici.

Arabia, *Papilio demoleus* on citrus in, II. **311.**

Arachis hypogaea (see Ground Nut).

Aradis plana, on roses in Russia, III. 105.
Araecerus fasciculatus, on cacao in Nigeria, III. 165; on coffee in Africa, I. 414, II. 283; on cotton in Africa, II. 2.
Aralia, scale-insects intercepted on, in California, III. 558, 626.
Aramigus fulleri (see *Pantomorus*).
arator, Heteronychus; *Hypera* (*Phytonomus*).
Araucaria, Ctenochiton araucariae on, in Australia, III. 652; *Coptotermes gestroi* on, in Java, I. 355; scale-insects on, in New Caledonia, III. 744.
Araucaria bidwilli (Monkey Puzzle), scale-insects on, in California, II. 435, III. 420; *Chrysomphalus* sp. on, in Peru, III. 135.
Araucaria excelsa (Norfolk Island Pine), *Pseudococcus* spp. on, in California, II. 435, 436; *Chrysomphalus* sp. on, in Peru, III. 135.
araucariae, Ctenochiton; *Eriococcus*,
Arbela, on tea in India, III. 489.
Arbela minima, on tea in Ceylon, II. 643.
Arbela quadrinotata (Bark-eating Borer), on tea and cacao in Ceylon, I. 89, III. 157, 300, 663.
Arbela tetraonis, food-plants of, in India, III. 300, 723; on kapok in Java, III. 312.
Arbela theivora, on tea in Assam, II. 643.
Arbor Vitae (see *Thuja*).
arbustorum, Plagiognathus.
arbuti, Rhopalosiphum.
Arbutus, Euproctis chrysorrhoea on, in France, I. 270.
Arbutus unedo (Strawberry Tree), *Polychrosis botrana* on, in France and Russia, II. 405, III. 210.
arceuthina, Argyresthia.
Archarias parcus, on coconut in Brazil, III. 695.
archesia, Remigia (see *Mocis undata*).
archippivora, Frontina.
Archips, remedies against, in U.S.A. III. 734.
Archips argyrospila (see *Cacoecia*).
Archips capucina (see *Tortrix*).
Archips postvittana (see *Tortrix*).
Archips rasana (see *Cacoecia*).
Archips rosaceana (see *Cacoecia*).
archipsidis, Meteorus.
Archodontes melanopus, on oak in U.S.A., III. 579.
Archon centaurus, on coconut in the Gold Coast, II. 142, III. 528.
Archytas analis, parasite of *Cirphis unipuncta* in U.S.A., III. 458, 684.
Archytas piliventris, parasite of *Cirphis* spp. in Texas, III. 684; parasite of *Laphygma frugiperda* in Porto Rico, I. 182, 184, II. 49, III. 477.
Arctia (*Chelonia*) *caja* (Tiger Moth, Woolly Bear), bacterial diseases of, I. 166, 249, 336, II. 90, 421: bionomics and control of, on vines, etc., in France, I. 250, 419, 504, II. 228, 362, 376, 421, 608, III. 33, 522; fungi infesting, in France, I. 249, 419, II. 229, 362, 376, 421; on vegetables, etc., in Russia, I. 493, III. 403; natural enemies of, I. 249, 274, 419, II. 362; on vines in Italy, III. 113.
Arctia curialis (see *Hyphoraia testudinaria*).
Arctia ricini (see *Pericallia*).
Arctia spectabilis, on onions in Russia, III. 221.
Arctia villica, on vegetables and vines in France, I. 69, 504, II. 362; on vines in Italy, III. 113.
arctica, Parastichtis (*Hadena*); *Pimpla.*
arctii, Trypeta (see *T. tussilaginis*).
Arctium minus, Metzneria lappella on, in Canada, III. 72.
arcuata, Horiola; *Lachnosterna.*
arcuatus, Entedon; *Plagionotus.*
Arcyptera (*Stethophyma*) *flavicosta*, bionomics and control of, in Russia and Siberia, I. 542, II. 353, 474, 509, III. 44, 437, 482, 537, 636.
Arcyptera fusca, in Russia, III. 437.
Arcyptera turcomana (see *Pallasiella*).
ardiferella, Saluria.
Ardis (*Selandria, Blennocampa*) *bipunctata*, on roses in France, I. 480; on roses in Holland, III. 743; on roses in Russia, I. 497, II. 442, 613, 719–720, III. 401, 443, 601, 610.
areator, Hemiteles.
Areca catechu (Areca nut) (see Betel Nut).
arecae, Stephanoderes.
arenacearia, Eubolia; *Tephrina.*
arenaria, Cerceris; *Psamma.*
Arenga saccharifera, I. 4; *Rhynchophorus ferrugineus* on, in the Straits Settlements, II. 99.
areolaris, Angitia.
areolatus, Biosteres.
ares, Prenes.
Arge (*Hylotoma*) *berberidis*, on barberry in Russia, III. 401.
Arge (*Hylotoma*) *pagana*, on roses in Russia, II. 719.
Arge (*Hylotoma*) *rosae*, on roses in Russia, II. 719.
arge, Apantesis.

argentata, Brachydeutera; *Leucopis.*
argentatus, Phyllobius.
argentifera, Phytometra (*Plusia*).
Argentina, destruction of ants-nests in, II. 593; new Aphids from, III. 54; Asparagus pests in, II. 593; control of *Aulacaspis pentagona* in, II. 207, 477, III. 524; citrus pests in, II. 207, 480, III. 694; miscellaneous insect pests in, I. 162, 310, II. 163, 164, 207, 638, III. 11, 92, 510; locusts and their control in, I. 162, II. 206, 238, 461, 462, III. 631.
Argentine Ant (see *Iridomyrmex humilis*).
Argentine Bag-worm (see *Oecticus platensis*).
Argentine Moth Borer (see *Cactoblastis cactorum*).
argentosus, Poliaspis.
argiades, Lycaena.
argillacea, Alabama.
Argina syringa, on *Crotalaria* in Ceylon, III. 83.
Argiope transversa, predaceous on *Stictocephala festina* in U.S.A., III. 334.
Argopistes silvestrii, sp. n., on olives in Africa, III. 431, 432.
Argyresthia alternatella, on juniper in U.S.A., III. 581.
Argyresthia arceuthina, on juniper in Holland, III. 741.
Argyresthia atmoriella, on larch in Britain, III. 459.
Argyresthia conjugella (Apple Fruit-miner), distribution of, II. 419; in Norway, III. 108; in orchards in Russia, III. 481; on apples in Vancouver, II. 676.
Argyresthia ephippiella, on cherries in Russia, II. 368, 369, III. 108.
Argyresthia illuminatella, bionomics of, in Sweden, III. 291, 697.
Argyresthia laevigatella, on larch in Britain, III. 459.
Argyresthia thuiella, in U.S.A., III. 475.
Argyresthia zelleriella, on larch in Britain, III. 459.
argyrognomon, Lycaena.
Argyroploce leucotreta (Orange Codling Moth), on citrus, etc., in S. Africa, II. 596, III. 502, 618.
Argyroploce rhynchias, in Mauritius, III. 731.
Argyroploce schistaceana, on sugar-cane in Mauritius and Reunion, I. 31, II. 215, III. 730, 756; on sugar-cane in Java, III. 383.
Argyroploce variegana, on apple in Russia, II. 342, III. 220, 613.
argyrospila, Cacoecia (*Archips*).
Argyrotoxa (*Tortrix*) *bergmanniana*, on roses in Russia, II. 613.
ariadne, Ergolis.
Aricia spinaciae, on spinach in Italy, III. 124.
aridella, Chaetocnema (see *C. hortensis*).
aridula, Chaetocnema.
aridus, Opius.
aristella, Lonchaea.
Aristotelia (Strawberry Crown Miner), in U.S.A., I. 132, III. 17.
Aristotelia elegantior, parasites of, in Hawaii, III. 681.
Aristotelia mendax, parasitised by *Eupelmus* spp. in Hawaii, III. 681.
Arizona, insect pests of, I. 179, II. 288, III. 269, 475, 511–513; *Anthonomus grandis* var. *thurberiae* on wild and cultivated cotton in, II. 78, 272, 583, 624, 650, III. 545, 691; pests of cactus in, I. 80; pests of date-palms in, I. 218, 518, III. 84, control of grasshoppers in, II. 541, III. 297; pests of lucerne in, III. 151, 153, 297, 333; new species of *Opius* parasitic on *Agromyza pusilla* in, I. 238; *Palaeococcus morrilli*, sp. n., in, II. 308.
Arizona Wild Cotton (see *Thurberia thespesiodes*).
arizonensis, Derostenus.
Arkansas, Cotton Boll Weevil in, I. 186, II. 650; *Diabrotica* spp. in, I. 429, 430.
Armadillidium nasutum, on field beans in England, II. 598.
Armadillidium quadrifrons, on greenhouse plants in Ontario, II. 491.
Armadillidium vulgare, on greenhouse plants in Ontario, II. 491; on potatoes and beans in England, II. 598.
armata, Pyrgodera.
Armatosterna buquetiana, on cacao in the Gold Coast, II. 141.
armatum, Lecanium (see *Ctenochiton spinosus*).
armatus, Achorutes; *Dacus* (*Tridacus*); *Epetrimerus.*
armatus nigriceps, Anagrus.
armenaicum, Eulecanium.
armicollis, Magdalis.
armigera, Heliothis (see *Chloridea obsoleta*); *Hispa.*
Armillaria mellea (Shoestring Fungus), relation between *Agrilus bilineatus* and, III. 162; on oaks in U.S.A., III. 331.
armillata, Angitia.
armillatorius, Mesoleius (*Tryphon*).
armipes, Apion; *Tyroglyphus.*

armoracia, Plutella.
armoraciae, Phyllotreta.
armstrongi, Duomitus.
Army Biscuit Enquiry, II. 236.
Army Cutworm (see *Euxoa agrestis*).
Army Worm (see *Cirphis unipuncta*).
Army Worm, Western (see *Euxoa agrestis*).
Arnoldia cerris, galls of, eaten by blue-tit in France, I. 169.
Aroa socrus, on sugar-cane in the Far East, I. 169. II. 490.
Arocatus continctus, on *Funtumia* in Africa, III. 166.
Arogallus lamberti, Cleonus quadrilineatus on, in Colorado, III. 266.
Aromia moschata, in Italian vineyards, II. 680.
Arrhenophagus, parasite of *Hemichionaspis minor* in Peru, I. 323.
Arrhenophagus chionaspidis, parasite of *Chionaspis* and *Hemichionaspis* in British Guiana, II. 520.
Arrow Head (see *Sagittaria latifolia*).
Arrowroot (*Maranta arundinacea*), *Calpodes ethlius* on, in Br. Guiana, II. 497; pests of, in the West Indies, I. 83, II. 143, III. 411.
Arrowroot Worm (see *Calpodes ethlius*).
Arrow-wood, not attacked by *Lymantria dispar* in U.S.A., III. 669.
Arsenate of Lead (see Lead Arsenate).
Arsenate of Lime (see Calcium Arsenate).
Arsenic, against cutworms, II. 336, 629, III. 20; against locusts and grasshoppers, I. 67, 249, 289, 543, II. 95, 519, 691, III. 293, 361; percentage of, in insecticides permitted in Montana, II. 559, 561; ineffective against *Oryctes rhinoceros*, II. 30; compared with Paris green, III. 21, 108, 602; useless against *Phlyctaenodes sticticalis*, I. 41; and starch, against *Lepisma saccharina*, III. 587, 714; against termites, I. 355, 464, III. 504; poisonous effects of, on trees, III. 395, 560; against wireworms, I. 216, 488, II. 119, 255, 344.
Arsenic Bisulphide, as an insecticide, III. 264.
Arsenic Sulphide, against *Hevea* pests in the Belgian Congo, III. 649.
Arsenic Tersulphide, as as insecticide, III. 264.
Arsenical Baits, formulae for, I. 473, II. 42, 60, 77, 95, 114, 118, 206, 289, 336, 344, 448, 519, 627, III. 20, 328, 359, 361.
Arsenical Sprays, formulae for, I. 107, 131, 352, 475, 518, II. 54, 90, 97, 110, 119, 162, 236, 311, 359, 446, 459, 460, 512, 552, 553, 560, 561, 626, 627, 686, 691, III. 21, 34, 218, 269, 270, 347, 529, 700.
Arsenicals, properties of, as insecticides, I. 468, II. 387, 399, 400, 546, III. 324; against vine pests, I. 72, II. 194, 195, 229, 297, 398, 399, 400, 418, 421, 446, 453, 552, 553, 557, 607, 608, 626, 635, 685, 686; danger of using, I. 67, 381, II. 195, III. 496; use of, in agriculture, II. 125, 297; legislation in France against the use of, in agriculture, II. 364; use of, as insecticides, forbidden in Germany, II. 195; cactus solution as an adhesive in, III. 295; ineffective against Aphids, II. 434; ineffective against *Otiorrhynchus sulcatus*, II. 360; ineffective against *Conorrhynchus mendicus*, II. 451; (see also Paris Green, Lead Arsenate, Sodium Arsenite, etc.).
Arsenite of Soda (see Sodium Arsenite).
Arsenite of Zinc (see Zinc Arsenite).
Artemisia, Aphids on, in France, III. 112; Aphids on, in Oregon, III. 588; not attacked by *Bothynoderes punctiventris* in Russia, II. 178; locusts on, in Russia, I. 543, III. 537; *Phlyctaenodes sticticalis* on, I. 40, II. 44.
Artemisia absinthium (see Wormwood).
Artemisia californica (California Sage), *Aphis frigidae* on, II. 251; *Pseudococcus* spp. on, II. 247, 435.
Artemisia campestris (Field Wormwood), Aphids on, in Italy, III. 54; pests of, in Russia, I. 486, II. 212.
Artemisia cirsium, Psalidium maxillosum on, in Russia, I. 478.
Artemisia heterophila, Macrosiphum ludovicianae on, in California, II. 251.
Artemisia tridentata, Macrosiphum artemisiae on, in Oregon, III. 588.
Artemisia vulgaris, Macrosiphum artemisicola on, in Oregon, III. 588; *Pyrausta nubilalis* on, in France, I. 409.
artemisiae, Cercopeus; Macrosiphum; Phenacoccus; Siphocoryne.
artemisicola, Macrosiphum.
Arthrocnodax, predaceous on *Tetranychus bimaculatus*, I. 353, III. 134.
Arthrocnodax apiphila, II. 33.

Arthrocnodax carolina, sp. n., parasitised by *Aphanogmus floridanus*, II. 704; enemy of *Tetranychus bimaculatus*, II. 33, 704.
Arthrocnodax constricta, probably predaceous on *Tetranychus bimaculatus*, III. 137.
Arthrocnodax occidentalis, predaceous on *Tetranychus* spp. in U.S.A., I. 144, II. 33.
Arthrocnodax rutherfordi, sp. n., predaceous on *Tetranychus* in Ceylon, III. 725.
Arthrocnodax walkeriana, sp. n., predaceous on *Pseudococcus* in Ceylon, III. 725.
Arthrolytus, parasite of *Acrocercops strigifinitella* in U.S.A., III. 415.
Arthrolytus dissimilis, parasite of *Phlyctaenodes sticticalis* in Russia, I. 360, 362.
Artichoke, *Aphis bakeri* on, in California, II. 251; *Hepialus humuli* on, in Scotland, II. 498; *Porpe bjerkandrella* on, in Mauritius, III. 160; pests of, in France, I. 227, 239, 339, 410, 429, II. 302, 310, 420, 450, 606, III. 33.
Artichoke Moth (see *Porpe bjerkandrella*).
articulatus, *Selenaspidus* (*Aspidiotus*, *Pseudaonidia*).
Artocarpus blumei, *Coptotermes gestroi* on, in Java, I. 355.
Artocarpus incisa (Bread-fruit), not attacked by *Ceratitis capitata* in Hawaii, I. 511; *Chrysomphalus aonidum* on, in the Seychelles, II. 566; *Helopeltis* on, in the Gold Coast, II. 671.
Artocarpus integrifolia (see Jak-fruit)
Artona walkeri, on rice in the Far East, II. 489.
Arum, *Pseudococcus filamentosus* on, in E. Africa, II. 146.
arundicolens, *Eucallipterus*.
arundinis, *Hyalopterus*.
Arundo, *Cacoecia costana* on, in France, I. 221.
Arundo donax, *Pyrausta nubilalis* on, in France, I. 409; *Stenaphis monticelli* on, in Italy, III. 54.
arvensis, *Eupteromalus*.
arvicola, *Exorista*.
Asafoetida, as an insecticide, I. 10.
Asaphes decoloratus, on clover in U.S.A., III. 300.
asaphombra, *Nacoleia*.
Asbecesta cyanipennis, on leguminous plants in Nyasaland, II. 277.
ascanii, *Lixus*.
Aschersonia, infesting scale-insects and whiteflies, I. 97, 266, 268; spraying with spores of, against whiteflies, III. 325.
Aschersonia aleurodis (Red Fungus), artificial infestation of whiteflies with, in Florida, II. 129, III. 23, 136; in Jamaica, III. 651.
Aschersonia flavocitrina (Yellow Fungus), artificial infestation of *Aleurodes nubifera* with, in Florida, II. 129, III. 136.
Aschersonia oxyspora, in the Gold Coast, II. 142.
asclepiadis, *Myzus*.
Asclepias, *Fiorinia fioriniae* on, in Peru, III. 135; Syrphidae trapped by, II. 66; *Aspidiotus perniciosus* on, II. 390.
Asclepias cornuti, *Aspidiotus perniciosus* on, I. 472.
Asclepias lunata, *Myzus asclepiadis* on, in Africa, III. 749.
Ascogaster, parasite of *Cydia pomonella* in Russia, III. 35.
Ascogaster annularis, parasite of *Hyponomeuta malinellus* in Russia, I. 347.
Ascogaster canifrons, parasite of *Cydia pomonella* in Russia, I. 368, III. 241.
Ascogaster carpocapsae, parasite of *Cydia pomonella* in U.S.A., II. 138, III. 476, 718; parasite of *Polychrosis viteana* in U.S.A., I. 113.
asellus, *Oniscus*.
Ash (*Fraxinus*), pests of, in British Isles, II. 498, III. 346, 633, 660, 754; pests of, in France, II. 195, 402, III. 694; *Scolytus pruni* on, in Germany, II. 485; *Dasychira pudibunda* on, in Holland, III. 196; pests of, in Russia, I. 208, 434, 461, II. 11, 692, III. 50, 119, 221, 225, 402, 540, 601; *Anobium striatum* on, in Sweden, III. 255; pests of, in Canada and U.S.A., I. 3, 101, 141, 148, 225, 280, 401, II. 251, 275, 294, 555, 600, III. 390, 588, 671, 686; resistant to gipsy moth in U.S.A., II. 711, III. 669.
Ash, Mountain (*Pyrus aucuparia*), *Eriosoma lanigerum* on, III. 718; pests of, in Britain, II. 498, 656; *Scolytus rugulosus* on, in Germany II. 486; *Cossus cossus* on, in Norway, III. 696; *Sciaphobus squalidus* on, in Russia, II. 337; pests of, in U.S.A., I. 25, II. 390, III. 161, 362, 423, 586, 654, 668.
Ash, Prickly, *Aleurodes citri* on, in U.S.A., I. 186.
Ashanti (see Gold Coast).
ashmeadi, *Philotrypesis*.
Asia, *Coccotrypes dactyliperda* on date-palm in, I. 351.

Asia, Central, migratory locusts in, **I. 138, II. 508**; *Mylabris frollowi* injuring camels in, II. 474; (see also Turkestan).
Asia Minor, *Anisoplia austriaca* in, II. 259; *Apate* spp. in, II. 196; *Coccinella septempunctata* in, I. 549; *Eurygaster integriceps* in, I. 446; citrus pests in, II. 189; fruit pests in, II. 419; *Hemerophila nemorana* in, III. 11; *Stilpnotia salicis* in, III. 138; *Ephestia cautella* bred from pears imported from, II. 321.
asiaticus, Prionus.
asiliformis, Aegeria (*Sesia*).
Asimina triloba, Euclea indetermina on, in U.S.A., II. 94.
Asiphum pseudobyrsa, food-plants of, in Colorado, II. 634.
Asiphum sacculi, sp. n., on poplars in Colorado, II. 343.
Aslauga lamborni, destroying Coccids in Nigeria, II. 203.
Aslauga vininga, destroying Coccids in Nigeria, II. 203.
Asopia farinalis (see *Pyralis*).
asparagi, Crioceris; *Tetrastichus.*
Asparagus, tests made with arsenidals on, II. 400; pests of, in Argentina, II. 593; *Saissetia anthurii* on, in Australia, III. 652; pests of, in Canada and U.S.A., I. 295, 400, III. 85, 407, 566; *Crioceris asparagi* on, in Germany, II. 501; pests of, in Italy, III. 124; bionomics of *Platyparea poeciloptera* on, II. 403, 404; pests of, in Russia, II. 465, 467, 468, III. 221, 481, 543; *Hepialus humuli* on, in Scotland, II. 498.
Asparagus madagascarensis, Aspidiotus cydoniae intercepted on, in California, III. 626.
Asparagus plumosus, pests of, in Ontario, II. 491; *Hemichionaspis minor* on, in U.S.A., III. 327.
Asparagus sprengeri, Aspidiotus hederae on, in California, III. 420.
Asparagus Beetle (see *Crioceris asparagi*).
Asparagus Beetle, Twelve-spotted (see *Crioceris duodecimpunctata*).
Asparagus Fly (see *Platyparea poeciloptera*).
Aspen, pests of, in France, I. 333; pests of, in Russia, II. 9, 13, 220, 332, III. 50, 130, 341, 535, 728, 729; spinning mites on, in Sweden, III. 253; not attacked by *Lymantria dispar* in U.S.A., III. 668; pests of, in U.S.A., II. 188, 600; (see *Populus tremula*).
asper, Rhyssemus.
Aspergillus, infesting bees, **I. 95, II. 678**; infesting *Pseudococcus sacchari* in Costa Rica and Porto Rico, I. 21, 185, II. 48; infesting *Pseudococcus calceolariae* in Br. Guiana, I. 522.
Aspergillus flavus, causing new disease of bees in Germany and England, I. 523.
Aspergillus pollini, infesting bees, I. 186, 443.
aspersa, Chrysopa.
asphaltinus, Otiorrhynchus.
Asphaltum, use of, against peach-borers, II. 431, 439, III. 194, 419, 529.
Asphaltum Oil, against *Agrotis unicolor*, III. 371; against *Blissus leucoptera*, I. 402, II. 469.
Asphenite, against termites, I. 465.
Asphondylia ervi, on lentils, I. 123.
Asphondylia miki, on lucerne in Europe, I. 527.
Asphondylia opuntiae, on cactus in U.S.A., III. 126.
Aspidimerus (*Cryptogonus*) *orbiculus*, destroying *Pseudococcus* sp. in the Philippines, II. 243; introduced into California against *Pseudococcus*, II. 436, III. 150.
aspidioti, Aphidencyrtus.
Aspidiotiphagus, parasite of *Chionaspis euonymi* in California, I. 363.
Aspidiotiphagus citrinus, parasite of *Aspidiotus* spp. in America and the West Indies, I. 323, II. 78, 117, 165, III. 143, 417, 650; imported into Hawaii, III. 757.
Aspidiotiphagus schoeversi, sp. n., parasite of *Hemichionaspis aspidistrae* in Holland, III. 736.
Aspidiotus, parasitised by *Androdiplosis coccidivora*, sp. n., III. 725; on camphor in Ceylon, II. 597; controlled by *Coccidophilus citricola* in Chile, I. 350; on tea in Uganda, I. 49; in Dominica, I. 77; on olives in Eritrea, II. 346; parasitised by *Physcus fijiensis* in Fiji, II. 495; on coconut in Zanzibar, III. 124.
Aspidiotus abietis, on *Picea pungens* in Holland, III. 201.
Aspidiotus alatus, sp. n., on eucalyptus in N. S. Wales, II. 324.
Aspidiotus ancylus (Putnam's Scale), declared a pest in British Columbia, I. 48; on currants and gooseberries in Missouri, III. 182.
Aspidiotus aonidum (see *Chrysomphalus*).
Aspidiotus articulatus (see *Selenaspidus*).
Aspidiotus aurantii (see *Chrysomphalus*).

Aspidiotus (*Pseudaonidia*) *baikeae*, on *Baikea insignis* in Uganda, II. 276.
Aspidiotus bavaricus, on *Calluna vulgaris* in Britain, I. 188.
Aspidiotus betulae (see *A. ostreaeformis*).
Aspidiotus bidens, sp. n., on *Casuarina* in Australia, III. 548.
Aspidiotus bowreyi (see *Pseudischnaspis*).
Aspidiotus britannicus, imported on bay trees from Belgium into New Jersey, III. 117; intercepted on palms in California, III. 690.
Aspidiotus bromeliae (see *Chrysomphalus*).
Aspidiotus californicus (Black Pine-needle Scale), on *Pinus ponderosa* in California, II. 245, III. 16.
Aspidiotus camelliae (see *A. rapax*).
Aspidiotus cedri, sp. n., on cedar logs in Australia, III. 548.
Aspidiotus ceratoniae (see *A. hederae*).
Aspidiotus coccineus (see *Chrysomphalus aurantii*).
Aspidiotus confusus, on *Eucalyptus* in N. S. Wales, II. 324.
Aspidiotus coralinus, on *Eremophila sturtii* in N.S. Wales, II. 324.
Aspidiotus cyanophylli, on camphor in Africa, I. 11, 415; intercepted on bananas in California, III. 558, 626; on *Inga reticulata* in Chile, I. 138; on *Musa* in Fiji, III. 548; in Peru, III. 135.
Aspidiotus cydoniae, intercepted on bananas in California, III. 494, 626; on *Solanum melongena* in British Guiana, II. 417; in Peru, III. 135; on palms in Uganda, I. 49.
Aspidiotus densiflorae (Tanbark Oak Scale), on *Quercus chrysolepis* in California, II. 245, 553.
Aspidiotus destructor (Bourbon Scale, Coconut Scale), on rubber, coconut, etc. in Africa, I. 11, 415, II. 142, 415, 422, 429, 671; on coconut in Australia, II. 691, III. 167; food-plants of, in the Belgian Congo, III. 649; in Fiji, I. 136, III. 548; not on bananas in Fiji, II. 132; on coconut in British Guiana, I. 139, II. 416, 417, 569, III. 591; intercepted on coconut in Hawaii, III. 739; on coconut in the West Indies, I. 136, 263, 285, 329, II. 87, 143, 460, 646, III. 14, 650; on coconut in Réunion, II. 216; not in Samoa, II. 7; on coconut in the South Sea Islands, II. 3; intercepted in U.S.A. from Philippines and Samoa, III. 455; control measures against, II. 460, 569, 646, 691; distribution of, I. 136; natural enemies of, II. 142, 216, 569, III. 14.
Aspidiotus dictyospermi (see *Chrysomphalus*).
Aspidiotus elegans, sp. n., in East Africa, II. 429.
Aspidiotus ficus (see *Chrysomphalus aonidum*).
Aspidiotus (*Chrysomphalus*) *fodiens*, on *Pithecolobium moniliferum* in Australia, III. 167.
Aspidiotus forbesi (Cherry Scale), in U.S.A., I. 283, II. 707, III. 182, 515.
Aspidiotus (*Pseudaonidia*) *fossor*, on grape-vine in Barbados, II. 276.
Aspidiotus gidgei, sp. n., on *Acacia cambagei* in Australia, II. 427.
Aspidiotus gowdeyi, sp. n., on *Anona muricata* in Uganda, I. 258.
Aspidiotus hartii (Yam Scale), intercepted on yams in California, III. 626; on *Dioscorea* in Fiji, III. 548; on yams in Grenada, II. 88.
Aspidiotus hederae (Oleander Scale), I. 136; on olives in South Africa, II. 298, III. 502; on red laurel in France, I. 376; in Peru, III. 135; on citrus, etc. in Spain, I. 99, 278, 297, 380, III. 143, 276; on citrus, palms, etc., in U.S.A., II. 247, III. 420, 494, 622; intercepted in U.S.A., II. 460, III. 117, 469, 690; use of lime-sulphur against, II. 609; parasites of, II. 117, III. 143, 357.
Aspidiotus juglans-regiae (English Walnut Scale), parasitised by *Coccidencyrtus ensifer*, sp. n., III. 724; controlled by parasites in Ontario, II. 492; on *Juglans* in Peru, III. 135.
Aspidiotus junctilobius, sp. n., on *Exocarpus aphylla* in Australia, II. 427.
Aspidiotus lataniae, on *Leucaena glauca* in Ceylon, III. 83; on citrus in Fiji, III. 548; on citrus in India, I. 279; intercepted on plants imported into U.S.A., II. 460, III. 558, 690, 739; on *Piper nigrum*, III. 725.
Aspidiotus nerii (see *A. hederae*).
Aspidiotus nigropunctatus, in Chile, I. 138.
Aspidiotus oceanicus, on coconut in the South Sea Islands, II. 691.
Aspidiotus oppugnatus, on olives in Africa, III. 432.
Aspidiotus orientalis, on banana and papaw in Australia, III. 167.
Aspidiotus osborni, in Chile, I. 138.

Aspidiotus ostreaeformis (European Fruit Scale, Pear-tree Oyster Scale), in S. Australia, II. **584**; lime-sulphur against, in Britain, II. **563**; declared a pest in British Columbia, I. **48**; not seriously injurious in British Columbia, II. **675**; on fruit trees in France, II. **165, 166**; on fruit trees in Germany, II. **500**; on citrus, etc., in Italy, I. **380**; control of, on fruit trees in Russia, II. **43, 366**, III. **100, 225, 393, 396**; control of, in U.S.A., I. **140**, III. **150, 529**; *A. bavaricus* mistaken for, I. **188**.

Aspidiotus palmae, on *Musa* in Fiji, III. **548**; imported on mango from Java into U.S.A., II. **460**.

Aspidiotus panici, sp. n., on *Panicum uncinatum* in Ceylon, III. **755**.

Aspidiotus perniciosus (Pernicious Scale, San José Scale), imported into S. Africa on Californian pears, II. **300**; legislation and remedies against, in S. Africa, II. **85, 86**; on vines in S. Africa, III. **502**; in orchards in Australia, III. **491**; in Britain, III. **346**; not present in British Columbia, I. **85**; intercepted in quarantine in California, III. **494, 558, 626**, bionomics and control of, in Canada and U.S.A., I. **53, 85, 130, 140, 169, 265, 276, 280, 379, 403, 405, 452, 467**, II. **3, 94, 185, 216, 247, 252, 390, 464, 492, 680**, III. **52, 69, 130, 137, 161, 179, 182, 192, 407, 408, 417, 473, 499, 512, 513, 514, 531, 554, 618, 678, 707, 734, 737**; legislation against, in Canada and U.S.A., I. **47, 85**, II. **208, 707**, III. **9, 32, 71, 516, 657**, in Japan, I. **63, 520**, II. **281**; quarantine measures against, in Switzerland, I. **224**; control of, in Tasmania, II. **66**, III. **410**; methods of controlling, I. **159, 265, 452**, II. **66, 86, 119, 165, 190, 209, 210, 217, 231, 378, 387, 390, 433, 434, 512, 545, 563, 673**, III. **122, 141, 182, 264, 328, 417, 464, 554, 599, 692, 707, 734, 737, 758**; food-plants of, I. **472**; natural enemies of, I. **63, 160, 511**, II. **165, 384, 385, 390, 625, 673, 674**, III. **130, 192, 417, 473, 724, 733**; resistance of, to lime-sulphur spray, II. **378**.

Aspidiotus personatus (see *Chrysomphalus*).

Aspidiotus (*Hemiberlesia*) *provincialis*, sp. n., on grasses in France, II. **425**.

Aspidiotus rapax (*camelliae*) (Greedy Scale), on fruit in South Africa, II. **298**, III. **502**; intercepted on palms in California, III. **690**; on tea in Ceylon, III. **157**; declared a pest in British Columbia, I. **48**; in Chile, I. **138**; imported into Hawaii on mistletoe from California, III. **364**; in Peru, III. **135**; on citrus in U.S.A., III. **512, 622**; legislation against, in U.S.A., I. **85**; new spp. of *Aphelinus* parasitic on, III. **357**.

Aspidiotus riverae, in Chile, I. **138**.

Aspidiotus rubribullatus, sp. n., on *Eucalyptus* in Australia, II. **428**.

Aspidiotus sacchari, on sugar-cane in British Guiana, I. **522**, II. **58, 417**.

Aspidiotus secreta saccharicaulis (see *Odonaspis*).

Aspidiotus secretus (see *Fiorinia*).

Aspidiotus serratus, sp. n., on *Acacia cambagei* in Australia, II. **428**.

Aspidiotus socotranus, sp. n., in E. Africa, II. **429**.

Aspidiotus tasmaniae, sp. n., plants attacked by, in Australia, III. **548**.

Aspidiotus tectonae, sp. n., in E. Africa, II. **429**.

Aspidiotus transparens (see *A. destructor*).

Aspidiotus transvaalensis, sp. n., on *Nerium oleander* in Pretoria, II. **353**.

Aspidiotus trilobitiformis (see *Pseudaonidia*).

Aspidiotus tsugae, on Japanese hemlock in New Jersey, II. **386**.

Aspidiotus unguiculatus, sp. n., in French Guinea, II. **353**.

Aspidiotus uvae (Grape Scale), remedies against, in Missouri, III. **182**.

Aspidiotus viticola, sp. n., on vines in Italy, II. **346**.

Aspidiotus zonatus, on oak in England, III. **346**.

Aspidistra, Hemichionaspis aspidistrae on, in Holland, III. **736**; pests intercepted on, in U.S.A., III. **354, 469**.

Aspidistra lurida, pests intercepted on, in U.S.A., III. **420**.

aspidistrae, Hemichionaspis (*Chionaspis*).

Aspidomorpha miliaris, I. **345**; parasitised by *Cassidocida aspidomorphae* in India, II **288**.

aspidomorphae, Cassidocida.

Aspidoproctus giganteus, on *Eriodendron* in Nigeria, II. **276**.

Aspilota fuscicornis, parasite of *Acidia heraclei* in France, III. **188**.

Asplenium, Aphelencus olesistus on, in Russia, II. **424**.

Asplenium nidus-avis (Bird's-nest Fern), *Hemichionaspis aspidistrae* on, III. 201.
Assam, *Aleurodes citri* on oranges in, I. 278; pests of *Funtumia elastica* in, II. 191, 192; pests of tea in, II. 152, III. 65, 300, 444.
assamensis, Serica; *Sphaerotrypes* (see *S. siwalikensis*).
assectella, Acrolepia.
assidua, Sarcophaga.
assimilata, Eupithecia.
assimilis, Ceuthorrhynchus; *Phrystola*; *Tarsonemus.*
assmuthi, Calotermes.
associata, Lygris.
associatus, Chlamydatus.
Astatus niger, on rye in Russia, II. 172.
Astatus troglodytes, on rye in Russia, II. 172.
Astelia, Pinnaspis nitidus on, in New Zealand, III. 721.
Aster, pests of, in Canada, II. 491; pests of, in U.S.A., I. 182, 430, II. 116, 303, III. 88, 351.
Aster ericoides (Wild Aster), pests of, in U.S.A., II. 303, 525.
Asterochiton packardi (Strawberry Whitefly), in Connecticut, III. 372.
Asterolecanium, intercepted on *Guacamaya francesca* in California, III. 495.
Asterolecanium bambusae, ants not associated with, in the Seychelles, II. 567.
Asterolecanium coffeae, on coffee in E. Africa, I. 415.
Asterolecanium epidendri, ants associated with, in the Seychelles, II. 567.
Asterolecanium fimbriatum, in Australia, III. 750.
Asterolecanium miliaris-longum, on *Schizostachium* in Fiji, III. 548.
Asterolecanium pustulans (Fringed Scale), on cacao in Grenada, III. 583; food-plants of, in British Guiana, II. 417, 569; on *Grevillea robusta* in Porto Rico, III. 518.
Asterolecanium quercicola, on oak in Australia, III. 750; on oak in Italy, III. 124.
Asterolecanium stypheliae, food-plants of, in Australia, III. 750.
Asterolecanium stypheliae var. *multiporum*, n., on *Samolus repens* in Australia, III. 548.
Asterolecanium variolosum (Pustular Oak Scale), on oaks in S. Africa, II. 300; in S. America, III. 303; on oaks in California, II. 115; on shade-trees in Quebec, III. 584.
Asterolecanium ventruosum, on *Acacia* in Australia, III. 750.
Asthenia pygmaeana (see *Tortrix*).
Asthenes, on cotton in Togoland, I. 349.
asthenogmus, Tetrastichodes.
Astichus, I. 549.
Astrachan, parasites of *Cydia pomonella* in, I. 431, 489; importation of parasites of *Cydia pomonella* into Turkestan from, II. 263; *Galerucella* spp. in, II. 36; miscellaneous insect pests in, I. 534, 536, II. 50, 51, 52, 53, 54, 262, 468, 648, 717, 718, III. 51, 171, 219, 338, 398, 478, 700; locusts in, I. 542, II. 213, 716; mustard pests in, I. 536, II. 355, 356, 357, III. 212, 637; orchard pests and their control in, I. 369, 437, 489, 534, 535, 536, II. 291, 348, 374, 614, 713; declared free from *Phylloxera*, II. 496; legislation against *Phylloxera* in, II. 627; vine pests in, I. 461, II. 625, 626, 627, 692; cost of pest destruction in, II. 700; experiments with insecticides in, II. 522; use of Government spray apparatus in, II. 613.
Astragalus glyciphyllus, Bruchophagus gibbus bred from, III. 8; *Thea vigintiduopunctata* on, in France, III. 92.
Astura punctiferalis, on fruit in Japan, I. 520.
Astyage lineigera, in bamboos in Brazil, III. 696.
Astycus immunis, on tea in Ceylon, III. 157.
Atactus deplanatus, on coconut in the South Sea Islands, II. 2.
Atalantia, Phyllocnistis citrella imported into U.S.A. on, from the Philippines, III. 455.
Atanycolus, parasite of *Agrilus bilineatus* in U.S.A., III. 162, 332.
Ateleneura spuria, parasite of *Typhlocyba*, III. 252.
Atelocera serrata, causing cacao canker in the Belgian Congo, II. 643.
Atelocera stictica, on mahogany in Nyasaland, II. 278.
Atenga, not attacked by rhinoceros beetle in the Seychelles, II. 568.
ater, Catolaccus; *Hylastes*; *Scymnus.*
aterrima, Phyllotreta.
aterrimus, Acythopeus; *Camptocampus.*
Athalia, on Cruciferae in E. Africa, I. 246, II. 278, 283.
Athalia colibri (*spinarum*), on radishes in France, I. 257; on vegetables in Japan, I. 520; bionomics and control of, in Russia,

I. 396, 536, II. 43, 355, 356, 373, 515, III. 41, 67, 109, 112, 172, 222. 399, 401, 443, 481, 542, 543, 606, 638; on vine leaves, II. 197.
Athalia rosae (Turnip Sawfly), on cabbages in Rhodesia, II. 236.
Athalia spinarum (see *A. colibri*).
Atherigona, intercepted in California, III. 625.
Atherosperma moschata, *Lecaniodiaspis atherospermae* on, in Australia, III. 751.
atherospermae, *Lecaniodiaspis*.
Athetis clavipalpis (*Caradrina quadripunctata*), food-plants of, in England, III. 659; in stored apples, II. 562.
Athoracophorus (*Janella*) *bitentaculatus*, erroneously supposed to injure flax in New Zealand, III. 302.
Athous hirtus, on maize in Russia, III. 541.
Athous niger, on cereals, etc., in Russia, I. 531, II. 43, 172, 202, 266, III. 46, 226, 309, 541, 601.
Athous niger var. *scrutator*, on maize in Russia, III. 541.
Athous subfuscus, in Russia, II. 466.
Athous tartarus, on maize in Russia, III. 46.
atlantis, *Melanoplus*.
atlas, *Attacus*.
Atlas Preservative, use of, against termites in S. Africa, I. 465.
Atmodes irrorata, on *Ficus* in Java, II. 535.
atmoriella, *Argyresthia*.
Atomaria linearis, on beet in Denmark, III. 246.
atomarius, *Bruchus* (*Laria*).
atomon, *Ooencyrtus*.
atomosa, *Marasmarcha*.
Atoposoma variegatum var. *afra*, parasite of *Dacus oleae* in Eritrea, III. 173, 432.
atra, *Laverna*; *Leucostoma*; *Orsodacna*; *Phylloscelis*; *Phyllotreta*.
Atractodes tenebricosus, parasite of *Chortophila brassicae* in Britain, III. 617, 627.
Atractodes vestalis (see *A. tenebricosus*).
Atractomorpha crenaticeps, in Hawaii, III. 363.
Atractomorpha crenulata, in India, III. 145.
Atractotomus, on apples in Britain, I. 236.
Atractotomus (*Capsus*) *mali*, on apple in England, II. 563, 659; preying on *Hyponomeuta malinellus* in Rumania, III. 344; synonyms of, III. 345.
atrata, *Elis*; *Silpha*.
atrator, *Meteorus*.
atratus, *Physothrips*.
atrica, *Tegenaria*.
atricapillus, *Penthestes*.
atriceps, *Liparetrus*; *Orthizema*.
atricornis, *Rhogas*.
Atriplex, *Pulvinaria maskelli* on, in Australia, III. 503; *Chromoderus fasciatus* and *Temnorrhinus brevirostris* on, in France, II. 90; pests of, in Russia, II. 63, 178, 311, 466, III. 93; importance of, as a host-plant of *Pegomyia hyoscyami*, III. 608.
Atriplex angustifolia, *Aphis rumicis* (*atriplicis*), on, I. 77.
Atriplex babingtoni, *Aphis rumicis* on, I. 77.
Atriplex hastata, *Aphis rumicis* on, I. 77.
Atriplex hortense, *Aphis rumicis* on I. 77, II. 494.
Atriplex laciniatum, insects on, in Russia, I. 486, II. 64.
Atriplex latifolia, *Aphis rumicis* on, I. 77.
Atriplex littoralis, *Aphis rumicis* on, I. 77.
Atriplex patilus, *Phlyctaenodes sticticalis* on, in Russia, I. 360.
Atriples patula, *Aphis rumicis* on, I. 77; on fallow land in Russia, II. 315.
Atriplex portulacoides, *Aphis rumicis* (*atriplicis*) on, I. 77.
Atriplex tataricum, *Euxoa segetum* and *Feltia exclamationis* on, in Russia, II. 212.
atriplicis, *Aphis* (see *A. rumicis*); *Trachea*.
atrocyanea, *Metriocharis*.
atrocoeruleus, *Tetrastichus*.
atrolineata, *Hemerophila*.
Atropa belladona (Deadly Nightshade), *Pegomyia hyoscyami* on, II. 616.
atropos, *Acherontia*.
atropunctata, *Eupteryx*.
atropurpureus Eupelmus.
atroviolacea, *Cercocephala*.
atrum, *Colaspidema*.
Atta cephalotes (Parasol Ant), legislation against, in Br. Guiana, III. 175; in Trinidad, III. 72; legislation against, in Trinidad, III. 367; destroyed by *Scolia campestris* in Brazil, I. 42.
Atta coronata, bionomics of, in Brazil, II. 28.
Atta discigera, bionomics of, in Brazil, II. 28.
Atta hystrix, bionomics of, in Brazil, II. 28.
Atta sexdens (Manioc Ant), infected with *Coccobacillus*, II. 462; remedies against, in Guiana, II. 646.

Attacus atlas, on camphor in Ceylon, II. 597; on tea in the Far East, II. 490.
Attacus cynthia, on *Ailanthus glandulosa* in Europe, II. 646.
Attacus ricini (Eri Silkworm), in India, II. 140.
Attagenus piceus, imported into Australia in woollen materials, III. 365; infesting zoological collections in Russia, III. 633.
Attelabus nitens (*curculionoides*), in Astrachan, III. 222.
attenuatus, Psylliodes.
atymnus, Loxura.
auctus, Trioxys.
Aucuba, Aleurodes imported into U.S.A. on, from Holland, III. 117.
Augiades (*Hesperia*) *sylvanus*, on oats in France, III. 428.
augias, Telicota.
Aulacaspis, destroyed by *Coccidophilus citricus* in Argentina, II. 207; **parasitised by *Dyodiplosis generosi*, sp. n., III. 725.**
Aulacaspis flacourtiae, sp. n., on *Flacourtia ramontchii*, in Ceylon, III. 168.
Aulacaspis manzanitae, sp. n., on *Manzanita* in California, I. 168, III. 420.
Aulacaspis myristicae, sp. n., on *Myristica laurifolia* in Ceylon, III. 168.
Aulacaspis pentagona (West Indian Peach Scale, Italian Scale, Mulberry Scale) on plums, etc. in Argentina, II. 163, 207, 477; declared a pest in British Columbia, I. 48; enemies of, in Ceylon, III. 83; on *Hibiscus* in Fiji, III. 548; in France, I. 229, II. 450; bionomics and control of, in Italy, I. 147, 221, 232, II. 123, 128, III. 80, 124, 740; in Japan, I. 232, 520, III. 80; on okra and pepper in Porto Rico, III. 476; ants not associated with, in the Seychelles, II. 567; on plums, etc. in the Seychelles, I. 129; legislation against, in Tennessee, III. 657; imported into U.S.A. from Japan, III. 85, 117, 354, 494, 546, 626; in U.S.A., II. 184, 707, III. 558; Coccinellid enemies of, I. 63, II. 128, III. 83; parasitised by *Prospaltella berlesei*, I. 147, 189, II. 124, 128, 207, 292, 403, 441, 477, 526, 592, III. 5, 251, 256, 524, 740.
Aulacaspis pyricola (see *Epidiaspis*).
Aulacaspis rosae (Rose Scale), II. 184; on *Rosa* sp. in Africa, II. 429; on blackberries imported into South Africa, II. 300; food-plants of, in Australia, III. 80; intercepted in California, III. 494, 558, 626; in Chile, I. 138; on mango in Br. Guiana, II. 417; on roses in Italy, III. 124; on roses in Peru, III. 135; on roses in Russia, III. 105, 182, 399, 443, 610; bionomics of, in U.S.A., I. 140, II. 439, III. 192, 422, 557; control of, in Victoria, III. 25.
Aulacaspis uncinati, sp. n., on *Panicum uncinatum* in Ceylon, III. 755.
Aulacaspis zamiae (see *Diaspis*).
Aulacophora, on snake-gourd in Ceylon, II. 644.
Aulacophora cartereti (Northern Banded Pumpkin Beetle), on cucurbitaceous plants in Queensland, II. 19.
Aulacophora coffeae, on lettuce in the Philippines, I. 314.
Aulacophora femoralis, on vegetables in Japan, I. 520.
Aulacophora olivieri (Banded Pumpkin Beetle), bionomics of, on cucurbitaceous plants in Queensland, II. 18.
Aulacophora wilsoni, on cucurbitaceous plants in Queensland, II. 19.
Aulax, on chicory, I. 256.
Aulax lini, sp. n., on flax in Sicily, III. 714.
Aulax scorzonerae, on salsify, II. 270.
aulicus, Mesoleius.
aulmanni, Stephanoderes; *Xyleborus.*
aurantiaca, Cecidomyia (*Contarinia*) (see *Sitodiplosis mosellana*); *Tachardia.*
aurantii, Aleurodes; *Chrysomphalus* (*Aspidiotus*); *Prospaltella*; *Toxoptera*; *Pulvinaria.*
aurata, Cetonia; *Crepidodera*; *Typhlocyba.*
auraticeps, Baeus.
auratus, Carabus; *Colaptes*; *Omalus*; *Rhynchites.*
aureoviridis, Ditropinotus.
auricephalus, Compsus.
auricilia, Chilo.
auricollis, Syrphus.
auricularia, Forficula.
auriculata, Lepidosaphes (*Mytilaspis*).
auricyanea, Mnemonica.
aurifacies, Chilo; *Cryptomeigenia.*
auriflua, Euproctis (*Porthesia*); *Scirpophaga* (see *S. xanthogastrella*).
aurilanatus, Pseudococcus.
auriscutellum, Abbella.
aurisquamosa, Opogona.
auritus, Lixus; *Monocrepidius.*
ausonia, Anomala.
australasiae, Anomala (see *A. antiqua*); *Mastochilus*; *Periplaneta.*

australe, Pentodon.
Australia, diseases and enemies of bees in, II. 379, 531; Coccidae of, I. 167, 392, II. 324, 435, 427, 652, 705, III. 79, 80, 167, 503, 548, 652, 750; legislation against insect pests in, I. 136, II. 83, III. 582; miscellaneous pests in, I. 217, 343, 411, 512, 514, II. 40, 281, 311, 396, 541, 584, 607, III. 3, 13, 27, 365, 470, 490, 491, 527, 565, 732, 758; pests on oranges from, intercepted in California, III. 739; pests of potatoes, and their control, in, I. 102, 377, II. 117–119, 280, 401, 705; termites from, III. 750; (see also under separate States).
Australian Acacia, *Chalioides junodi* on, in S. Africa, I. 303.
Australian Bug (see *Icerya purchasi*).
Australian Fern Weevil (see *Syagrius intrudens*).
Australian Myrtle, *Chrysomphalus rossi* on, in South Africa, II. 300.
australicum, Trichogramma minutum.
australicus, Xylotrupes.
australis, Anoxia; Dasygnathus; Leptoglossus; Scapanes; Teleonemia.
Austria, importance of insectivorous birds in, II. 148; grain pests in, II. 259, 429, 453, 475, 502, 590; miscellaneous pests in, I. 189, 239, II. 177, 262, 403, 419, 481, III. 566; vine pests in, I. 248, 469, III. 497.
austriaca, Anisoplia; Eurygaster; Vespa rufa.
Austrian Pine (see *Pinus austriaca* and *Pinus laricio*).
Autographa (see *Phytometra*).
autographus, Dryocoetes.
Autumn Webworm (see *Hyphantria cunea*).
autumnalis, Dimorphopteryx.
autumnata, Oporabia.
auxiliaris, Euxoa (*Chorizagrotis*).
avellanae, Eriophyes.
Avena, Aphis avenae on, in U.S.A., II. 696.
Avena fatua, Oria musculosa on, in Russia, III. 5.
Avena flavescens, Oscinella frit on, in Russia, II. 371.
avenae, Aphidius; Aphis (*Hyadaphis, Siphocoryne*); *Heterodera schachtii; Mayetiola* (*Cecidomyia*).
Avocado Pear (Alligator Pear) (*Persea gratissima*), *Polycaon confertus* on, in California, III. 625; pests of, in Ceylon, II. 151, III. 157; *Heliothrips rubrocinctus* on, in Florida, I. 99; *Helopeltis* on, in the Gold Coast, II. 671; pests of, in British Guiana, II. 417; pests of, in Hawaii, I. 374, III. 411; pests of, in the West Indies, I. 165, II. 13, 50, 284; *Ceratitis capitata* on, in Java, III. 3; not attacked by termites in Natal, I. 13; *Helopeltis antonii* on, in the Philippines, III. 137; pests in seeds of, introduced into U.S.A. from Guatemala, III. 455; *Heilipus lauri* on, II. 13, 461.
Avocado Weevil (see *Heilipus lauri*).
Axiagastus cambelli, on coconut in the Solomon Islands, II. 691.
Azalea, *Hoplia pubescens* on, in California, II. 708; *Phenacoccus azalea,* sp. n., on, in Japan, III. 127; not attacked by *Lymantria dispar* in U.S.A., III. 669; insect pests imported on, into U.S.A., II. 186, 435, III. 117, 354, 355, 454, 463, 469, 513.
Azalea indica, Gracilaria zachrysa on, in Holland, III. 199, 463.
azalea, Phenacoccus.
azaleae, Gracilaria (see *G. zachrysa*); *Pseudococcus.*
Azarole, *Ceratitis capitata* on, in Sicily, III. 143.
Azores, *Phthorimaea operculella* in, II. 401.
Azotus chionaspidis, parasite of *Chionaspis difficilis* in Japan, II. 495.
Azotus elegantulus, sp. n., parasite of *Chionaspis* in Eritrea, III. 433.
Azteca chartifex (Balata Ant), associated with *Aspidiotus destructor* in Trinidad, I. 285; on coconuts in Trinidad, II. 460.
azurea, Chrysobothris.
Azurgin, formulae for, I. 348, 361; use of, against *Phlyctaenodes sticticalis,* I. 361, 493, 494, III. 404.
Azya pontbrianti, predaceous on *Saissetia hemisphaerica* in Br. Guiana, II. 416, 520.
Azya trinitatis, predaceous on *Aspidiotus destructor* in Br. Guiana, II. 416, 569.
Azygophleps scalaris, in India, II. 139.

B.

β-naphthol, against foul brood in bees, II. 678.
babista, Baccha.
baccarum, Dolycoris (*Pentatoma*); *Mormidea; Neuroterus.*
Baccha babista, Chalcid parasites of, in Ohio, II. 66.
Baccha clavata, parasitised by *Bassus laetatorius* in U.S.A., II. 599; predaceous on *Carolinaia cyperi* in U.S.A., III. 407.

Baccha lemur, predaceous on *Pseudococcus yerba-santae* in California, I. 307, II. 437.
bacchus, Rhynchites.
Bacillus alvei, causing foul brood in bees, I. 94, 95, 442, 444, 445, 523, II. 677, 678.
Bacillus amylovorus (Fire Blight), on apple trees in California, III. 685; disseminated by insects, II. 288, III. 464.
Bacillus bombycis, infesting *Anoxia australis*, I. 336; infesting *Bothynoderes punctiventris*, II. 180; infesting silkworms, I. 307.
Bacillus brandenburgiensis, infesting bees, I. 444, 445, II. 678.
Bacillus butlerovi, infesting bees, I. 442, 444, 445.
Bacillus cajae, I. 337; infesting *Arctia caja*, II. 90, 362, 421.
Bacillus cleoni, infesting *Conorrhynchus mendicus*, II. 90, 451.
Bacillus coli, II. 451.
Bacillus gortynae, infesting *Xanthoecia flavago* (*Gortyna ochracea*), I. 552.
Bacillus larvae, causing American foul brood in bees, II. 530.
Bacillus lymantriae, I. 337.
Bacillus melolonthae, infesting cockchafers, I. 306, 337.
Bacillus mesentericus, infesting bees, I. 95.
Bacillus pluton, infesting bees, II. 530.
Bacillus prodigiosus, experiments with locusts and, III. 683.
Bacillus pyrameis, infesting *Pyrameis cardui*, I. 552.
Bacillus sacchari, infesting sugarcane, III. 92.
Bacillus septicus insectorum, infesting *Lachnosterna*, III. 584.
Bacillus solanacearum (Brown Rot), infesting tomatoes, III. 540; lime-sulphur against, III. 472.
Bactra straminea, parasitised by *Cremastus hymeniae* in Hawaii, III. 682.
Bactrocera (see *Dacus*).
badiana, Phalonia (*Conchylis*).
badiella, Depressaria.
badius, Termes.
baetica, Lampides (*Lycaena*).
Baeus auraticeps, sp. n., parasite of spiders in Br. Guiana, III. 675.
Bag Moth (see *Hyalarcta nigrescens*).
Bagrada hilaris (Bagrada Bug), on crucifers in S. Africa, I. 473, II. 236, III. 618.
Bagrada picta, in Africa, II. 570; on cabbages in Ceylon, I. 89.
Bagworms (Psychidae), *Isaria psychidis* against, in Argentina, II. 638; on tea and camphor in Ceylon, II. 597, 643; on cacao in the Gold Coast, II. 141; on cinchona in Java, III. 313; on *Delouix regia* in Manila, I. 314; on African almond in Zanzibar, III. 125; parasites of, III. 125.
Bagworm, Argentine (see *Oeceticus platensis*).
Bagworm, Wattle (see *Chalioides junodi*).
Bahamas, *Cylas formicarius* in, III. 461; *Eriopus floridensis* in, II. 92; legislation against imported pests in, III. 492.
Baikea insignis, Aspidiotus baikeae on, in Uganda, II. 276.
baikeae, Aspidiotus (*Pseudaonidia*).
Baits, for ants, II. 615, III. 529; for cutworms and army worms, I. 84, 182, 194, 287, 462, II. 24, 118, 159, 248, 314, 302, 315, 336, 361, 381, 448, 560, 564, 629, 680, III. 18, 20, 78, 86, 193, 327, 359, 371, 411, 419, 426, 450, 469, 529, 565, 620; for wireworms, II. 119, 159, 304, 344, 372, III. 205, 688; for fruit-flies, I. 195, 271, II. 77, 195, 289, 302, 452, 479, III. 29, 36, 58, 567; for grasshoppers and locusts, I. 453, II. 65, 95, 159, 249, 302, 519, 542, III. 63, 99, 263, 297, 298, 328, 368, 415, 426, 451, 466, 652; for mole-crickets, II. 42, III. 450, 471; for termites, I. 465, 466; for vine moths, I. 1, 9, 416, II. 194, 233, 234, 359, 405, 411, 421, 511, 538, 557, 680, III. 561, 616; for woodlice, II. 491; for *Xyleborus*, II. 486.
bajulus, Hylotrupes; *Phileurus.*
bakeri, Aphis; *Pseudococcus.*
Balaninus (Chestnut Weevil), intercepted in chestnuts from Kentucky, III. 289.
Balaninus nucum, on hazelnuts in France, III. 694; bionomics of, in Russia, II. 672, III. 393.
Balanogastris kolae, not damaging kola fruits in the Gold Coast, II. 141; in kola nuts in Nigeria, III. 166.
Balata Ant (see *Azteca chartifex*).
Balearic Isles, *Chrysomphalus dictyospermi* var. *pinnulifera* in, I. 297.
Balkans, *Anisoplia austriaca* in, II. 259.
Ball Kamani (see *Calophyllum inophyllum*).
ballotae, Contarinia.
balloui, Calotermes.
Balm, Mountain (see *Eriodictyon californicum*).
Balm of Gilead (see *Populus balsamifera*).

Balsam Fir, *Ips balsameus* on, in Canada, II. **25**, III. **43**; Aphids on, in Maine, I. **141**.
Balsam Poplar (see *Populus balsamifera*).
Balsam Twig Aphis (see *Mindarus abietinus*).
balsameus, Ips.
balsamiferae, Pemphigus.
Balsamorrhiza sagittata, Glyptoscelis pubescens on, II. **676**; *Otiorrhynchus ovatus* on, in California, I. **93**.
balteata, Diabrotica.
balteatus, Syrphus.
Baluchistan, *Carpomyia pardalina* on melons in, II. **426**; *Leucaspis salicis* on *Salix* from, III. **345**; locusts in, III. **461**.
Bamboo, pests of, in East Africa, I. **247**, II. **146**; weevils infesting, in Brazil, III. **306, 696**; *Eucalliptorus arundicolens* on, in California, II. **251**; scale-insects on, in Ceylon, III. **755**; new thrips on, in Florida and Louisiana, III. **631**; *Asterolecanium pustulans* on, in Br. Guiana, II. **417**; pests of, in India, I. **381**, II. **68, 139**; *Pyrausta coclesalis* on, in Java, I. **170**; attacked by locusts in the Malay States, II. **111, 134**; *Pseudococcus citri* on, in the Philippines III. **724**; pests imported into U.S.A. on, III. **117, 420, 455, 589**; *Dinoderus minutus* in, in Zanzibar, III. **124**.
Bambusa (see Bamboo).
Bambusa birmanica, pests of, in India, III. **723**.
Bambusa tulda, Ochrophora montana on, in India, III. **723**.
bambusae, Aleurodes; *Leucaspis*; *Sphaerococcus*.
Banana (*Musa*), pests of, in Australia, I. **20**, II. **511, 584**, III. **167, 490**; pests of, in Brazil, II. **28**; scale-insects on, in California II. **436**; pests of, in Ceylon, II. **193**, III. **724**; pests of, in the Far East, II. **490**; locusts on, in the Malay States, II. **111**; pests of, in Fiji, I. **136**, II. **133, 506, 548**, III. **726**; *Leptinotarsa decemlineata* imported into Germany on, II. **712**; *Helopeltis* on, in the Gold Coast, II. **671**; pests of, in Br. Guiana, II. **417**; legislation against pests of, in Br. Guiana, III. **175**; control of pests of, in Hawaii, I. **374**, II. **690**, III. **29**; *Ligyrus ebenus* on, in the West Indies, I. **253**; *Pseudococcus grassii* on, in Italy, II. **346**, fruit-flies on, in Java, III. **3, 713**; pests of, in Nigeria, III. **164**; *Ecpantheria eridanus* on, in Porto Rico, III. **518**; *Cosmopolites sordidus* on, in the Seychelles, III. **410**; attacked by *Schistocerca paranensis* in Trinidad, III. **674**; *Ceratitis capitata* bred from, in Uganda, II. **59**; pests imported on, into U.S.A., III. **455, 494, 558, 626, 739**; experiments with *Ceratitis capitata* in, I. **38**; not attacked by termites, I. **13**; (see also Plantain).
Banana Borer (see *Cosmopolites sordidus*).
Banana Root Grub (see *Ligyrus ebenus*).
Banana Weevil (see *Cosmopolites sordidus*).
Banchus, parasite of *Feltia exclamationis* and *Euxoa segetum* in Russia, III. **536**.
bancrofti, Tarsonemus.
Banded Pumpkin Beetle (see *Aulacophora olivieri* and *A. cartereti*).
banian, Hieroglyphus.
banksi, Tenuipalpus.
Banksia serrata, Ceronema banksiae on, in Australia, III. **503**.
banksiae, Ceronema.
Barathra (*Mamestra*) *brassicae*, on vegetables in France, I. **504**, II. **588**; on cabbage in Italy, III. **124**; bionomics and control of, on cruciferous and other crops in Russia, I. **313, 395, 490, 499, 500, 539, 541**, II. **43, 315, 341, 442, 502, 504**, III. **46, 50, 52, 94, 109, 111, 204, 218, 340, 390, 393, 399, 403, 481, 592, 601, 639, 701**; cabbages not attacked by, when grown with tomatoes, III. **340**; parasitised by *Trichogramma semblidis*, I. **432, 436, 489, 541**, II. **345, 523, 588**, III. **613**.
Barbados, insect pests of, I. **83, 97**, II. **30–32, 142–144, 531–533, 691**, III. **5, 461, 555, 626, 666, 736**; *Aleurodicus cocois* on coconut in, II. **691**; *Aspidiotus fossor*, sp. n., from, II. **276**; parasites of Scarabaeid larvae in, III. **500**; *Siniphora occidentalis* imported into Peru from, I. **323**; pests of sugar-cane in, I. **83, 98, 252, 253, 254**, II. **30, 151, 284, 531, 693**; attempted introduction of *Tiphia parallela* into Mauritius from, III. **756**.
Barbados Blackbird (*Quiscalus fortirostris*), destroying *Erinnyis ello*, II. **533**.
Barbados Cherry (*Malpighia glabra*), *Duomitus punctifer* on, in Barbados, II. **533**; pests of, in Br. Guiana, II. **417**.

Barbados Sugar-cane Root Borer (see *Diaprepes abbreviatus*).
Barbarea praecox (Winter Rocket), *Chortophila brassicae* on, in France III. 189.
Barbarea vulgaris, *Phyllotreta nemorum* on, in Russia, I. 211.
barbarus, *Brachycerus*.
Barbary, Lepidopterous pests in, III. 426.
barbatus, *Dyscinetus*; *Pogonomyrmex*.
Barberry (*Berberis*), pests of, in Russia, III. 45, 401; pests of, in U.S.A., I. 381, III. 668.
barbirostris, *Rhina*.
Barbuda, *Dyscinetus barbatus* in, I. 253.
bardanae, *Tephritis*.
Baridius aterrimus (see *Acythopeus*).
Baridius lepidii (see *Baris*).
Baris, on cabbage in Russia, III. 443.
Baris chloris, on turnips in France, I. 504; on cruciferous plants in Russia, I. 210, 395, III. 67, 397.
Baris (*Baridius*) *lepidii*, on vegetables in Russia, III. 393.
Baris picina, on rape in Bessarabia, I. 395.
Barium, in insecticides against orchard pests, II. 673.
Barium Chloride, ineffective against *Athalia colibri*, II. 373; not very effective against *Biston hirtarius*, III. 50; against *Bothynoderes punctiventris*, II. 180, III. 93, 109; against *Cassida nebulosa*, I. 489, III. 94; injections of, against *Eriosoma lanigerum* III. 395; against *Hylotoma rosae*, III. 76; against *Hypera denominanda*, II. 262; against *Hyponomeuta malinellus*, I. 347, II. 647, III. 105, 109; against *Procris* (*Ino*) *ampelophaga*, I. 363; ineffective against *Laphygma exigua* II. 249; against *Lophyrus pini*, III. 106, 401; ineffective against *Melolontha*, II. 10, 11; against *Pegomyia hyoscyami*, II. 467, III. 232, 608; against *Phlyctaenodes sticticalis*, I. 361, 394, II. 63, 481 493, 494, III. 93, 404; against, *Sitones lineatus*, III. 106; against pests of sugar-beet, III. 542; against vine pests, I. 10, 72, II. 354, 495; cost of, II. 354, 590, 647; formulae for using, I. 212, 348, 361, 394, 479, 492, 493, II. 262, 647, 669, III. 536; as a substitute for Paris green, III. 109; production of, in Russia, III. 94.
Barium Polysulphide, advantages of, over lime-sulphur, III. 448.
Barium-sulphur, a substitute for lime-sulphur, in U.S.A., III. 707.
Barium Tetrasulphide, III. 651; and lead arsenate, effective against *Cydia pomonella*, III. 737.
Bark Beetle (see *Scolytus*, *Xyleborus*, *Dendroctonus*, etc.).
Bark Beetle, Clover (see *Hylastinus obscurus*).
Bark Beetle, Fruit-tree (see *Scolytus rugulosus*).
Bark Beetle, Peach-tree (see *Phloeotribus liminaris*).
Bark-eating Borers, of cacao and tea (see *Arbela*).
Barley (*Hordeum*), pests of, in Algeria, II. 231; Aphids on, in S. and E. Africa, I. 39, II. 153, 154, 276, 571; pests of, in Austria-Hungary, II. 309, 475; pests of, in Britain, I. 434, III. 660; pests of, in Canada and U.S.A., I. 383, 430, II. 225, 246, 491, III. 18, 70, 270, 333, 348, 351, 368, 416, 463, 509, 551, 576, 630, 683; pests of, in Denmark, III. 208, 246, 697, 698; *Tyroglyphus farinae* on, in France, II. 503; pests of, in Germany, II. 377, 500; pests of, in Holland, I. 386, III. 198; *Laphygma exempta* on, in Rhodesia, III. 359; pests of, in Russia, I. 364, 446, 460, 479, 484, 490, 493, 537, II. 34, 35, 40, 171, 172, 319, 341, 343, 352, 471, III. 5, 41, 50, 67, 112, 128, 147, 206, 226, 231, 307, 338, 339, 397, 402, 443, 479, 487, 537, 543, 600, 610, 635; *Aphis avenae* on, in U.S.A., II. 696; not attacked by *Chortophila* (*Adia*) *genitalis*, in Russia, II. 351; *Mayetiola destructor* on, II. 225, 231, III. 338, 416, 635; value of, damaged by insects in U.S.A., I. 265; *Oscinella frit* on, I. 364, 434, 484, 490, II. 341, 343, 371, III. 41, 128, 147, 231, 600; considered immune to *Tarsonemus spirifex* in Holland, III. 665.
Barley (stored), pests of, I. 340, II. 453, 564, III. 487.
Barley Aphis (see *Aphis avenae*).
Barred-winged Onion Fly (see *Chaetopsis aenea*).
Barringtonia racemosa, not attacked by *Pseudococcus filamentosus* in E. Africa, II. 146.
Barsacq liquid, formula for, against vine moths, II. 412.
Barypeithes pellucidus (see *Exomias*).
Barynotus obscurus, on lucerne in Europe, I. 527.

Baryscapus, I. 549; parasite of *Datana integerrima* in U.S.A., I. 525.
Barythrips sculpticauda, sp. n., on pine in Florida and Louisiana, III. 631.
basalis, Ceresa; *Poeciloscytus*.
basicorne, Apion.
basicornis. Telephorus.
Basic Slag, against Aphids, I., 236 358; against pests of bush fruit, II. 500; against pests of cabbages, II. 266, III. 218, 390; against *Phyllotreta* spp., I. 213, III. 312, 390; against wireworms, I. 358, II. 265, III. 112; ineffective against wireworms, III. 309.
basilinea, Trachea (*Hadena*).
Basiliocephalus thaumatonotus, on coconut in the South Sea Islands, II. 3.
Basiothia charis, on cotton in Africa, II. 1.
bassettella, Euclemensia.
Bassus, parasite of *Lasiophthicus* (*Catabomba*) *pyrastri*, in U.S.A., III. 142.
Bassus carpocapsae, sp. n., parasite of *Cydia pomonella* in U.S.A., III. 418, 691.
Bassus coleophorae, sp. n., parasite of *Coleophora leucochrysella* in U.S.A., III. 658.
Bassus earinoides (see *Microdus*).
Bassus laetatorius, parasite of Syrphids in S. Africa, II. 154; parasite of Syrphids in Russia, III. 308; parasite of *Baccha clavata* in U.S.A., II. 599.
Basswood (*Tilia americana*), not attacked by gipsy moth, II. 711; pests of, in U.S.A., I. 3, 225, III. 552, 671, 672.
batatae, Euscepes (*Cryptorrhynchus*).
batatas, Spartocera.
Bathymetis, parasite of *Polychrosis viteana*, in U.S.A., I. 112.
Batocera albofasciata, bionomics of, in Java, II. 533–535.
Batocera gigas, bionomics of, in Java, II. 533, 534.
Batocera hector, bionomics of, in Java, II. 534, 535.
Batocera rubus, on *Albizzia lebbek* in Mauritius, III. 730; on *Hevea* in the Far East, II. 491.
Batodes (*Capua*) *angustiorana*, on oaks and vines in England, II. 563, 619, III. 660; on *Laurus nobilis* and rhododendrons in Holland, III. 199.
Batophila rubi, on raspberries in Russia, III. 106; on strawberries in Sweden, III. 695.
batrachopa, Enarmonia.
Bats, destroying noxious insects, I. 271, 464, 530, II. 60, 91, 222, 619, III. 392.
Bat Whitefly (see *Paraleurodes perseae*).
Bauhinia, not attacked by *Pseudococcus filamentosus* in E. Africa, II. 146; *Acrocercops* on, in Ceylon, II. 597; *Xyleborus fornicatus* in, in Ceylon, II. 513.
Baumé Hydrometer, for testing spray solutions, II. 388.
Bavaria, control of *Phylloxera* in, II. 274, 633; *Tarsonemus spirifex* in, III. 665.
bavaricus, Aspidiotus.
Bay Tree (*Laurus nobilis*), *Coccus hesperidum* imported on, into Hawaii, III. 170; pests of, in U.S.A., III. 326, 348; insect pests imported on, into U.S.A. from Belgium, III. 117, 354, 355, 469, 513.
Bdella, on coconut in the South Sea Islands, II. 3.
Beans, Aphids on, I. 78, 188, 227, II. 281, 428, 494, 660, III. 9, 526, 749; pests of, in E. Africa, I. 246, 247, 414, 415, II. 283, III. 749; pests of, in Australia, I. 193, 512, II. 18, 541; pests of, in Austria, II. 429; pests of, in Britain, II. 598, 656, III. 9, 159, 460; pests of, in Canada, I. 289, II. 491; pests of, in Ceylon, II. 644, III. 83; pests of, in Denmark, III. 246, 526, 698; pests of, in France, I. 409, II. 488, 622, III. 279; *Sitones lineatus* on, in Germany, III. 102; pests of, in Guam, III. 374; *Bruchus chinensis* intercepted in, from Japan, III. 657; *Sitones lineatus* on, in Holland, III. 198; pests of, in Italy, II. 511, III. 59; *Phytalus smithi* on, in Mauritius, I. 28; pests of, in Nigeria, III. 166; *Hemichionaspis minor* on, in Peru, I. 323; pests of, in Rhodesia, I. 289; pests of, in Russia, I. 493, II. 465, 501, 502, III. 50, 610; spinning mites on, in Sweden, III. 252; pests of, in U.S.A., I. 102, 179, 180, 264, 299, 417, 430, 476, II. 160, 161, 491, 542, III. 29, 64, 450, III. 453, 471, 581, 688, 709, 737; pests of, in the West Indies, I. 329, II. 87, III. 22, 477, 504, 626.
Beans, Carob, (see *Ceratonia siliqua*).
Beans, Castor (see Castor Oil Plant).
Beans, Stored, pests of, II. 160, 422, 498, 693, III. 460.
Beans, Soy (see Soy Bean).

Beans, Turkish, not attacked by *Oria musculosa* in Russia, II. 319.
Beans, Velvet, *Cerocti trifurca* on, in Nyasaland, II. 277; pests of, in U.S.A., I. 264, III. 306, 326, 327; not attacked by *Heterodera radicicola*, III. 178; (see Velvet Bean).
Bean Aphis (see *Aphis rumicis*).
Bean Bruchus (see *Bruchus rufimanus*).
Bean Fly (see *Agromyza phaseoli*).
Bean Leaf-roller (see *Eudamus proteus*).
Bean Stem Maggot (see *Agromyza fabalis*).
Bean Thrips (see *Kakothrips robustus* and *Heliothrips fasciatus*).
Bean Weevil (see *Bruchus obtectus*).
Beauveria, infesting insects, II. 376, III. 189.
Beauveria bassiana, infesting *Phthorimaea operculella*, II. 401.
Beauveria effusa, infesting *Pthhorimaea operculella*, II. 401.
Beauveria globulifera infesting *Haltica ampelophaga*, II. 310; infesting *Phthorimaea*, II. 401.
beckeri, *Mylabris*.
beckii, *Lepidosaphes* (*Mytilaspis*); *Aegeria* (*Sanninoidea*).
Beddewela's Termite Mixture, I. 74; ineffective against *Calotermes militaris*, II. 512.
bedellella, *Aphelosetia* (*Elachista*).
Bedellia orchilella, parasitised by *Omphale metallicus* in Hawaii, III. 681.
bedfordi, *Macrosiphoniella*.
Bedstraw (*Galium molugo*), *Polychrosis botrana* on, in Russia, III. 210.
Bee Louse (see *Braula caeca*).
Bee Martin (see *Tyrannus tyrannus*).
Bee Moth (see *Galleria melonella* and *Achroia grisella*).
Beech (*Fagus*), pests of, in Britain, III. 660, 715, 754; pests of, in Canada and U.S.A., I. 277, 280, 381, II. 203, 294, III. 415, 552, 668, 671, 673; *Xyleborus dispar* on, in France, II. 402; pests of, in Germany, II. 486, 571; pests of, in Holland, III. 195, 198, 743; *Pemphigus* on, in Italy, III. 54; *Lachnus fagi* on, in Norway, III. 697; pests of, in Russia, II. 334, 419, 640, III. 66; *Anobium striatum* in, in Sweden, III. 255; not favoured by gipsy moth in U.S.A. II. 711; *Aspidiotus perniciosus* on, I. 472.
Beech Aphis (see *Phyllaphis fagi*).
Beech Coccus, Felted (see *Cryptococcus fagi*).
Beech Leaf-mining Weevil (see *Rhynchaenus fagi*).
Beech Orchestes (see *Rhynchaenus fagi*).
Bees, distributing pear blight in California, III. 149; culture and bionomics of, I. 26, 27, 220, 379, 403, 503, II. 26, 27, III. 100, 142, 225, 568; diseases of, I. 94, 186, 330, 331, 441–446, 523, 536, II. 14, 102, 238, 417, 530, 564, 677, III. 38, 152, 169, 335, 592, 612, 712; legislation against diseases amongst, in Canada and U.S.A., II. 20, 185, 418; natural enemies of, I. 275, 313, 326, 343, 403, 453, II. 64, 137, 164, 379, 564, 714, III. 40, 103, 225, 403, 732.
Beet (*Beta vulgaris*), pests of, in Belgium, II. 176; pests of, in Britain, I. 77, 435, II. 616, 660, III. 747; pests of, in Canada and U.S.A., I. 40–42, 87, 291, 292, 298, 299, 352, 359, 400, II. 115, 251, 303, 381, 491, 536, 623, 665, III. 18, 335, 351, 352, 359, 457, 578; pests of, in Denmark, III. 246, 698; pests of, in France, I. 188, 227, 229, 334, 524, II. 17, 89, 90, 236, 420, 450, 477, 620; pests of, in Germany, II. 377, 494, 500, 640; pests of, in Holland, I. 386, III. 198, 202, 740; *Thea vigintiduopunctata* on, in Italy, II. 150; *Silpha atrata* on, in Luxemburg, I. 385; not attacked by grain pests in Russia, II. 171, 319; pests of, in Russia, I. 357, 358, 394, 459, 478, 485–487, 489, 493, 494, 500, 539, 540, II. 34, 43, 63, 64, 177–180, 248, 314, 340, 341, 425, 442, 465–468, 481, 504, 523, 648, 715, 716, 718, III. 19, 50, 67, 93, 102, 105, 119, 222, 309, 394, 403, 443, 480, 481, 536, 542, 592, 610, 635, 640; pests of, in Scandinavia, III. 107, 526; Aphids on, I. 77, 188, 227, II. 17, 177, 188, 236, 420, 478, 481, 494, 620, 660, III. 351, 635; *Phlyctaenodes* (*Loxostege*) *sticticalis* on, I. 40, 394, 459, 493, 494, II. 442, III. 105, 111.
Beet Aphis (see *Aphis rumicis*).
Beet Fly (see *Pegomyia hyoscyami*).
Beet Leaf-miner (see *Chortophila vicina*).
Beet Moth (see *Phthorimaea ocellatella*).
Beet Webworm (see *Phlyctaenodes sticticalis*).
Beggarweed, not attacked by *Heterodera radicicola*, III. 178.
begini, *Diaulinus*.

Begonia, Euthrips tritici var. *projectus* on, in Florida, III. **357**; Elaterids on, in Russia, III. **439**; *Otiorrhynchus sulcatus* on, in Scotland, I. **388**.
Belgian Congo (see Congo).
Belgium, insect pests in, I. **39, 77,** II. **176,** III. **742, 761**; insect pests from, intercepted in U.S.A., II. **186,** III. **117, 354, 454, 690**; protection of insectivorous birds in, I. **291, 297**.
Belippa, on cacao in Java, I. **4**; on tobacco in Sumatra, III. **202**.
Belippa bohor, on tea in India, III, **489**; on cacao in Java, III. **662**.
bella, Leucopis.
bellicosus, Polistes; *Termes*.
bellis, Haplothrips.
bellus, Monocrepidius.
Belvosia unifasciata (see *Goniomima*).
Bembecia (see *Pennisetia*).
benefica, Eumicrosoma.
beneficiens, Phanurus (*Prophanurus, Ceraphron*).
benevola, Nepeira.
Bengal, control of *Dacus zonatus* in, II. **558**; *Phthorimaea operculella* in, I. **509**; *Psylla* sp. damaging indigo in, I. **43**; (see India).
Bengal Bean Worm (see *Anticarsia gemmatalis*).
bennigseni, Ootheca.
bengalensis, Xyleborus (see *X. semigranosus*).
Benzaldehyde, for trapping thrips, cost of, II. **271**.
Benzine, against carpet and furniture beetles, III. **184, 256**; for trapping *Ceratitis capitata*, III. **28**; against clothes moths, III. **509**; against *Eriosoma* spp., III. **201, 362**; and petroleum, against locusts in Sicily, III. **39**; formula for emulsion of, against vine moths, II. **411**; against woodborers, I. **407,** II. **158, 174, 196, 591,** III. **198**.
Benzol, against *Leptinotarsa decemlineata*, II. **712,** III. **712**; against *Lyctus canaliculatus*, I. **385**; against *Nysius vinitor*, III. **470**; against *Orthorrhinus klugi* I. **195**; against thrips, II. **118,** III. **97, 470**.
berberidis, Arge (*Hylotoma*); *Eulecanium* (*Lecanium*).
Berberis (see Barberry).
Berberis aquifolium, food-plant of *Aulacaspis pentagona*, I. **222**.
Berberis nepalensis, Eulecanium (*Lecanium*) *magnoliarum* on, in Japan, III. **127**.
Berberis stenophylla, food-plant of *Aulacaspis pentagona*, I. **222**.
bergi, Aleurodes.
Berginus tamaricis, on *Funtumia* in Nigeria, III. **166**.
bergmanniana, Argyrotoxa (*Tortrix*).
bergrothi, Helopeltis; *Lathridius*.
Berlese formula, against olive fly, I. **271,** III. **36**.
berlesei, Prospaltella.
Bermuda, *Ceratitis capitata* in, I. **164,** III. **171**
Bermuda Grass (*Cynodon dactylon*), pests of, in U.S.A., III. **333, 576, 683**.
Berocera madagascariensis, parasites of, in Madagascar, I. **287**.
berolinensis, Dicerca.
Berrya ammonilla (Trincomalee Wood), bark-eating borers of, in India, III. **300**.
Berseem (see *Trifolium alexandrinum*).
Bessarabia, insect pests in, I. **395, 397, 459,** II. **37, 42, 76, 201, 279, 317, 337, 365, 465, 468, 648, 650, 692**; *Phylloxera* introduced from Germany into, II. **167**; vine pests in, I. **461, 462, 487, 488,** II. **43**; (see also under Russia).
Beta vulgaris (see Beet).
betae, Pemphigus; *Rhopalosiphum*.
betavorus, Bothynoderes.
Betel Nut (*Areca catechu*), pests of, I. **350,** II. **583**; insects imported on, into U.S.A., III. **420, 494, 558, 626, 690, 739**; not attacked by rhinoceros beetle in the Seychelles, II. **568**.
bethunei, Graptolitha (*Xylina*); *Metallus*.
Betula (see Birch).
Betula alba, Aulacaspis pentagona on, I. **221**.
Betula fontinalis, Euceraphis gillettei, sp. n., on, in California, III. **686**.
betulae, Aspidiotus; *Bycticus*; *Chaitophorus*; *Euceraphis*; *Phyllobius*; *Rhynchites*; *Thecla*.
betulaecolens, Calaphis.
betulella, Acrolepia.
betuleti, Agrilus; *Rhynchites* (see *Bycticus betulae*).
betulinus, Hamamelistes.
Beyeria viscosa, Mytilaspis beyeriae, sp. n., on, in Australia, III. **548**.
beyeriae, Mytilaspis (*Fernaldella*).
bhurmitra, Ectropis (*Boarmia*).
Bibio, on potatoes in Ireland, II. **655**.
Bibio hortulanus, on hops in England, II. **564,** III. **660**; bionomics of, in Germany, II. **377**; on sugar-beet, etc., in Russia, II. **34,** III. **222, 592**.
Bibio johannis, food-plants of, in England, I. **434**.

Bibio marci, food-plants of, in England, I. 434; not on apple blossom in Ireland, II. 8; in Russia, III. 105, 222, 309, 540.
Bibio nervosus, on fruit trees in Oregon, III. 272.
bicaudatus, Amphicerus; *Pseudococcus* (see *P. virgatus*).
biclavis, Howardia.
bicolor, Catoxantha; *Cebrio*; *Lixus*; *Melanoxantherium*; *Neotetranychus* (*Tetranychus*); *Pegomyia*; *Rhynchites*; *Sphaeropyx*; *Taphrorhynchus* (*Bostrychus*); *Zygothrips*.
bicoloripes, Paraleurocerus.
Bicuda buceros, Myrmelachista ambigua ramulorum nesting in, in Porto Rico, I. 389.
Bidens pilosa (Black-jack), food-plant of *Phytometra orichalcea* in Rhodesia, III. 361.
bidens, Aspidiotus (*Hemiberlesia*); *Tomicus* (see *Pityogenes bidentatus*).
bidentata, Gonodontis; *Odontoptera*.
bidentatus, Dyscinetus; *Pityogenes* (*Ips*); *Progenius*.
bidentulus, Corigetus.
bifascia, Bombycomorpha.
bifasciata, Acrocercops; *Erotolepsiella*.
bifasciatipenne, Polynema.
bifasciatum, Rhagium.
bifasciatus, Anastatus.
biformis, Chrysomphalus (*Targionia*); *Platypus*; *Tylenchus*.
bifoveolatum, Ophion.
biggsi, Neurotrichus.
Bignonia catalpa, Aulacaspis pentagona on, I. 221.
biguttatus, Agrilus.
biguttella, Anacampsis.
biguttulus, Stauroderus (*Stenobothrus*).
Bilberry, *Dendrolimus* spp. on, in Russia, II. 220.
bilineata, Aleochara.
bilineatus, Agrilus; *Ichneumon*; *Meniscus*.
Bill-bug (see *Sphenophorus*).
bilobus, Olenecamptus.
bimaculata, Oberea; *Thelia*.
bimaculatus, Gryllus; *Pteromalus*; *Schistoceros* (*Apate*); *Tetranychus* (see *T. telarius*).
bimarginata, Haltica.
Bindweed, *Nupserha apicalis* on, in S. Africa, III. 61; *Phlyctaenodes sticticalis* on, in Europe, I. 40.
Bindweed Gall-maker (see *Nupserha apicalis*).
binotalis, Crocidolomia.
binotata, Enchenopa.
binotata signata, Hyperaspis.
binubila, Apomecyna.
bioculatus, Tenuipalpus; *Perilloides* (*Perillus*); *Tetranychus*.
Biomyia georgiae, parasite of *Calosoma sycophanta* in U.S.A., I. 402.
Biosteres, parasite of *Ceratitis capitata* in West Africa, II. 317.
Biosteres areolatus, parasite of *Anastrepha fraterculus* in Brazil, I. 321.
Biosteres brasiliensis, parasite of *Anastrepha fraterculus* in Brazil, I. 321.
Biosteres caudatus, sp. n., from Nigeria, II. 346.
Biosteres rhagoletis, sp. n., parasite of *Rhagoletis pomonella* in U.S.A., III. 753.
bipars, Oeceticoides (*Acanthopsyche*).
bipartitus, Dacus.
Biphymaphorus pulchripennis, sp. n., from Lagos, II. 346.
biplaga, Earias.
bipunctalis, Pachyzancla.
bipunctata, Andraca; *Ardis* (*Blennocampa, Selandria, Tenthredo*); *Coccinella* (*Adalia*); *Chlorita*; *Neoxabea*.
bipunctatus, Calocoris; *Malachius*; *Nephotettix*; *Pelargoderus*; *Scymnus* (*Chilocorus*).
bipunctifer, Schoenobius.
bipustulatus, Dacus (*Bactrocera, Chaetodacus*); *Chilocorus*; *Malachius*.
Birch (*Betula*), pests of, in Britain, I. 388, II. 192, 705, III. 633, 754; pests of, in Canada and U.S.A., I. 35, 140, 231, 381, 401, 403, 407, II. 188, 251, 294, 307, 390, III. 418, 530, 668; pests of, in France, I. 333; *Croesus septentrionalis* on, in Germany, II. 148; pests of, in Holland, I. 385, 386, III. 198; *Cossus cossus* in, in Norway, III. 696; pests of, in Russia, I. 317, II. 9, 11, 13, 198, 220, 332, III. 43, 50, 223, 389, 401, 728, 729; pests of, in Sweden, III. 147, 255.
Birch, Grey, not resistant to gipsy moth in U.S.A., I. 149, II. 294, 711.
Birch, Sweet, (see *Ceanothus integerrimus*).
Birch, White, partly resistant to gipsy moth in U.S.A., II. 711.
Birch Leaf-roller (see *Peronia ferrugana*).
Birch Tar, ineffective against ants, III. 139; against insects damaging grain, II. 40; against *Lymantria dispar*, I. 496, 523, II. 274.
Bird Cherry (see *Prunus avium* and *P. padus*).

Bird's Nest Fern (*Asplenium nidus-avis*), *Hemichionaspis aspidistrae* on, in Holland, III. 201.
Birds, protection and economic value of, I. 17, 36, 54, 83, 169, 235, 236, 274, 291, 297, 298, 305, 306, 345, 360, 393, 464, 478, 479, 530, II. 24, 39, 85, 131, 147–149, 155, 176, 214, 227, 229, 306, 529, 574, 576, 584, 595, 708, III. 57, 324, 327, 377, 379, 420; destroying grasshoppers and locusts, I. 67, II. 72, 126, 148, 509, 574, III. 243, 297, 337, 368, 603, 720; destroying insect pests, I. 17, 36, 42, 54, 68, 131, 167, 169, 182, 184, 201, 223, 224, 226, 231, 244, 274, 305, 306, 318, 345, 360, 366, 372, 378, 387, 430, 462, 464, 478, 481, 518, 521, 530, II. 39, 48, 49, 60, 85, 94, 121, 147–149, 156, 176, 179, 194, 222, 223, 227, 229, 307, 394, 463, 504, 509, 525, 527, 529, 535, 574, 575, 697, 708, III. 24, 78, 188, 190, 196, 211, 243, 249, 256, 264, 270, 294, 297, 300, 327, 334, 342, 359, 361, 369, 371, 377, 379, 380, 392, 404, 420, 475, 485, 535, 537, 539, 551, 559, 603, 710, 746; insects avoided by, I. 481, II. 311, 362; destroying galls, I. 169; doubtful value of, against vine moths, II. 182; protection of seeds against, I. 26.
birmanus, Aclees.
biroi, Promecotheca.
Biscuits, insects infesting, I. 292–294, 330, II. 235, III. 402, 677; sterilisation of, against insect pests, I. 292, 293, 329, II. 235.
Biscuit Beetle (see *Laemophloeus pusillus*).
biselliella, Tineola (*Tinea*).
Bismarck Archipelago, cotton pests in, I. 349.
bispinosus, Mecopus.
Biston cinerarius, bionomics of, in Russia, II. 636, 714.
Biston graecarius, on lucerne in Europe, I. 527.
Biston hirtarius, control of, in orchards in Astrachan, II. 718, III. 49, 50, 51, 221, 399, 641.
Biston pomonarius (see *Apocheima*).
Biston pomorius, sp. n., on quinces in Astrachan, II, 374.
Biston suppressarius (see *Buzura*).
bistridentatus, Pityogenes (*Tomicus*).
bistrigatus, Dacus.
Bisulphide of Carbon (see Carbon Bisulphide).
Bitter Aloes, in copper spray against *Otiorrhynchus*, II. 608.
Bitter Gourd Fruit Fly (see *Dacus cucurbitae*).
Bitter Rot, in apples, remedies for, II. 359.
Bittersweet (see *Celastrus scandens* and *Solanum dulcamara*).
Bitter Wood (see *Picroena excelsa*).
bitterensis, Ephippiger.
bituberculata, Aphis.
bituberculatum, Eulecanium (*Lecanium*).
bituberculatus, Dolichoderus; *Tomarus.*
bivittata, Diabrotica.
bivittatus, Dacus (*Tridacus*); *Luperodes*; *Melanoplus.*
bivulnerus, Chilocorus.
Bixa orellana, Xyleborus fornicatus on, in Ceylon, II. 513; *Helopeltis bergrothi* on, in Java, III. 662.
Bixadus sierricola, Anthores leuconotus incorrectly recorded as, I. 22, 24.
bizonata, Mylabris.
bjerkandrella, Porpe.
Black Aphis (see *Aphis rumicis* and *Toxoptera aurantii*).
Black Apple Leaf-hopper (see *Idiocerus provancheri*).
Black Arches (see *Lymantria monacha*).
Black Beetroot Aphis (see *Aphis rumicis*).
Black-bodied Cherry Fruit Fly (see *Rhagoletis fausta*).
Black Cherry Aphis (see *Myzus cerasi*).
Black Coffee Aphis (see *Aphis coffeae*).
Black Currant (see Currant).
Black Currant Mite (see *Eriophyes ribis*).
Black Cutworm (see *Agrotis ypsilon*).
Black Digger Wasp (see *Tiphia inornata*).
Black Fig Fly (see *Lonchaea aristella*).
Black Fly (see *Aphis rumicis*).
Black Fungus (see *Myriangium duriaei*).
Black-headed fungus (see *Myriangium*).
Black Ironwood (see *Olea laurifolia*).
Black-jack (*Bidens pilosa*), *Phytometra orichalcea* on, in Rhodesia, III. 361.
Black Knot (see *Plowrightia morbosa*).
Black Leaf 40, against Aphids, I. 83, 90, 205, 266, 405, 453, II. 5, 22, 161, 188, 189, 387, 512, 527, 562, 697, 710, III. 122, 180, 192, 362, 363, 373, 408, 415, 419, 471, 516, 678, 738; against *Cacoecia argyrospila*, I. 425, II. 15; and iron sulphate, against insect pests, II. 389; against leaf-miners, I.

55, 296, 387, II. 361, III. 114; against mites, I. 353, III. 372; percentage of nicotine in, III. 505; and kerosene, against *Rhynchaenus canus*, III. 456; against *Psylla pyri*, I. 128, III. 373; unsatisfactory against *Rhagoletis pomonella*, III. 59; against various Rhynchota, I. 127, 277, 402, II. 135, 228, III. 271, 373, 407, 414, 471, 473; against sawflies, I. 131, II. 6, 710; and soap, formulae for, III. 271, 372; against thrips, I. 264, 512, II. 116, 161, 188, 247, 380, 387, 438, 554, III. 178; with zinc arsenite, II. 561; (see also Nicotine and Tobacco).
Black Lime Scale (see *Ischnaspis longirostris*).
Black-margined Flea-Beetle (see *Systena marginalis*).
Black Olive Scale (see *Saissetia oleae*).
Black Onion Fly (see *Tritoxa flexa*).
Black Peach Aphis (see *Aphis persicae* and *A. persicae-niger*).
Black Pine-needle Scale (see *Aspidiotus californicus*).
Black Rot (see *Guignardia bidwelli*).
Black Scale (see *Saissetia oleae*).
Black Spot, in apple orchards in Nova Scotia, III. 516.
Black-spotted Ladybird (see *Adalia flavomaculata*).
Black Spruce (see *Picea nigra*).
Black Squash Bug (see *Anasa tristis*).
Black Vine Weevil (see *Otiorrhynchus sulcatus*).
Black Walnut Caterpillar (see *Datana integerrima*).
Blackberry (*Rubus fruticosus*), *Stephanoderes coffeae* on, in E. Africa, II. 447; pests of, in S. Africa, I. 303, II. 300; pests of, in Canada and U.S.A., I. 53, 69, 132, 140, 161, 181, 277, II. 116, 390, 439, 599, 674, III. 23, 58, 69, 77, 181, 265, 270, 372, 419, 422, 515; not attacked by *Lymantria dispar* in U.S.A., III. 669; *Macrosiphum granarium* on, in Germany, II. 406; *Aulacaspis rosae* on, in Australasia, III. 80; pests of, in Russia, III. 106, 210, 609.
Blackberry Leaf-miner (see *Metallus rubi*).
Blackbird, Red-winged (see *Agelaius phoeniceus*).
blackburni, Chelonus; *Limnerium*; *Nacoleia* (*Phryganodes, Omiodes*).
Blackthorn (*Prunus spinosa*), pests of, in Russia, III. 210, 402; destruction of, recommended against *Melolontha*, II. 524.
Blacus, parasite of *Otiorrhynchus sulcatus*, II. 360.
Blacus fuscipes, parasite of *Xyleborus saxeseni* in Germany, II. 486.
Bladder Campion (*Silene inflata*), *Polychrosis botrana* on, in Russia, III. 210.
Bladder Senna (see *Colutea arborescens*).
blanchardi, Parlatoria.
Blanchard's Scale (see *Parlatoria blanchardi*).
blanda, Exorista; *Systena*.
Blaniulus guttulatus, on hops, etc., in Britain, II. 564, 656, III. 14; on lettuce in Christiania, III. 107; food-plants of, in France, II. 557; on maize and strawberries in Russia, III. 44, 393; on potato in Sweden, III. 435.
Blaps lethifera, on beet in Russia, I. 486.
Blaps mortisaga, in nest of *Lathrodectus tredecimguttatus* in Russia, III. 537.
Blapstinus, on beans and sugar-beet in California, I. 417, II. 303.
Blapstinus pimalis, on vegetables in Arizona, III. 512.
blaptoides, Damaster; *Zabrus*.
Blastobasis lecaniella, destroying scale-insects in British Guiana, I. 343, II. 416.
Blastophaga grossorum, in figs in Australia, III. 527.
Blastophaga nota, sp. n., in *Ficus nota* in the Philippines, I. 341.
Blastophaga psenes, in figs in France, III. 11.
Blastothrix subproxima, sp. n., parasite of *Pseudococcus* in Eritrea, III. 433.
Blennocampa bipunctata (see *Ardis*).
Blennocampa geniculata, on strawberries in Sweden, III. 695.
Blennocampa pusilla, on roses in Holland, II. 642, III. 743; on roses in Ireland, II. 656; on roses in Russia, II. 720.
Blepharidea, parasite of Lepidoptera, II. 528.
Blepharidea vulgaris (see *Phryxe*).
Blepharidopsis nemea, parasite of *Abraxas grossulariata* in Russia, III. 639.
Blepharipeza, I. 114.
Blepyrus marsdeni, imported into Hawaii against scale-insects, III. 757.
Blissus, on currants in Norway, III. 108.
Blissus diploptera, on wheat in S. Africa, II. 299.

Blissus leucoptera (Chinch Bug), bionomics and control of, in Canada and U.S.A., I. **53, 173, 305, 401, 524, 533,** II. **226, 383, 468, 536, 585,** III. **290, 421, 426, 509, 533, 565**; natural enemies of, I. **524, 533,** II. **585,** III. **452, 509, 565**; infected with *Sporotrichum globuliferum*, I. **524,** III. **136, 509.**
Blister Beetles, bionomics of, in Canada and U.S.A., I. **243, 404,** II. **518,** III. **581**; (see *Lytta* and *Mylabris*).
Blister Mite (see *Eriophyes*).
Blitopertha lineolata, erroneously recorded as *Anisoplia deserticola*, I. **486,** II. **466.**
Blitophaga undata, on wheat and sugar-beet in Russia, III. **480.**
Blitum, *Bothynoderes punctiventris* on, in Russia, II. **64.**
Bloodwood (*Eucalyptus* spp.), *Callodes grayanus* on, in Queensland, III. **491.**
Blosyrus seminitidus, on *Hevea* in the Belgian Congo, III. **649.**
Blueberries (*Vaccinium* spp.), pests of, in U.S.A., III. **57, 89, 223, 668, 672.**
Bluebird (*Sialia sialis*), destroying insect pests in U.S.A., I. **226,** III. **377.**
Blue Bug (see *Zicrona caerulea*).
Blue Grosbeck (see *Guiraca caerulea*).
Blue-flag, not attacked by *Lymantria dispar* in U.S.A., III. **669.**
Blue Flea-Beetle (see *Phyllotreta consobrina*).
Blue Tit (*Parus coeruleus*), destroying noxious insects, I. **167, 169, 306, 478,** II. **229.**
Blumea balsamifera, *Acrocercops* sp. on, in Ceylon, II. **597**; *Macrosiphum orientale*, sp. n., on, in Java, I. **139.**
Boarmia, on coca in Java, III. **312.**
boas, *Oryctes*.
Boat Gall Aphis (see *Aphis rumicis*).
bodkini, *Aphanurus* ; *Vitula*.
Boeotomus subapterus, parasite of *Mayetiola destructor* in U.S.A., III. **416.**
bogoriensis, *Encyrtus*.
bogotensis, *Tomaspis*.
bohemani, *Calidea* ; *Sternotomis*.
Bohemia, forest pests of, I. **394,** II. **482, 483, 720**; *Kakothrips robustus* in, III. **279**; pests of hops in, I. **245, 410**; *Trachea basilinea* on grain in, II. **453, 482**; *Ortheziola vejdovskyi* in, I. **243.**
bohor, *Belippa*.
boisduvali, *Anoplognathus* ; *Diaspis*.
Bokhara, importance of cotton cultivation in, II. **38**; campaign against locusts in, II. **38, 72, 508,** III. **400.**
bolivari, *Maura*.
Bolivia, *Ectatomma tuberculatum* in, I. **317**; locusts of, I. **341**; *Rhigopsidius tucumanus* on potatoes in, I. **546,** II. **241, 460.**
Boll Weevil, Mexican Cotton, (see *Anthonomus grandis*).
Boll Worm, Common (see *Chloridea obsoleta*).
Boll Worm, Pink (see *Gelechia gossypiella*).
Boll Worm, Red (see *Diparopsis castanea*).
Boll Worm, Spiny (see *Earias insulana*).
Bolyphantes alticeps, on conifers in Britain, I. **120.**
Bolyphantes expunctus, on conifers in Britain, I. **120.**
Bolyphantes luteolus, on conifers in Britain, I. **120.**
Bombax ceiba (see *Eriodendron anfractuosum*).
Bombax malabaricum, attacked by *Coptotermes gestroi*, I. **355**; *Sipalus hypocrita* on, in China, III. **723.**
bombi, *Nosema*.
Bombus, list of species of, parasitised by *Nosema bombi*, III. **168.**
bombycis, *Trycolyga* (see *T. sorbillans*).
Bombycomorpha bifascia, bionomics of, in S. Africa, I. **12, 146,** II. **653.**
bombylans, *Volucella*.
Bombyx mori (Silkworm), II. **547**; *Coccobacillus* infections in, I. **336**; in Madagascar, I. **286.**
Book Louse (see *Troctes divinatoria*).
boraginis, *Ceuthorrhynchus*.
Borassus flabelliformis, pests of, in Straits Settlements, II. **99.**
Borax, effect of, on insects, III. **692**; solution of, against *Stictococcus dimorphus*, II. **59.**
borbonicus, *Eulophus* ; *Paragus*.
bordagei, *Apanteles*.
Bordeaux Mixture, useless against *Chionaspis tegalensis*, III. **319**; against *Dacus oleae*, II. **289**; against flea-beetles, I. **136, 203, 300,** II. **21, 160, 302,** III. **193, 328, 472, 512, 547**; against *Leptinotarsa decemlineata*, I. **476,** III. **469**; against orchard pests, I. **135, 382, 404, 475,** II. **359, 360, 388, 389, 457, 458, 459,** III. **79, 509, 513, 514, 607**; against scale-insects, II. **206, 218, 459,** III. **619**; against thrips, I. **198,** II. **70, 460,** III. **689**; against

vine pests, I. 71, 223, 231, 244, 312, 332, 338, 472, 487, II. 25, 47, 166, 239, 309, 458, 486, 510, 538, 635, 666, 667, 683, 685, III. 602; addition of adhesives to, I. 547, 548, II. 681, III. 523; chemistry of, II. 647, 648, III. 30–32, 292, 519, 520–522; dangers of using, III. 496; formulae for, and preparation of, I. 294, II. 71, 110, 459, 550, 624, 647, 648, III. 30–32, 79, 292, 518, 520–522, 619; result of mixing with other insecticides, III. 734; phenolphthalein test for, II. 462, III. 495; action of, on plants, II. 245, 618, III. 358; and black leaf 40, III. 192, 264; and lead arsenate, II. 546, 562, III. 177, 301, 547, 554, 619, 673, 754; and Paris green, II. 274, 330, III. 177, 645; and zinc arsenite, III. 177.

Bordeaux-arsenical mixture, against grasshoppers, III. 328.

Bordeaux-nicotine sulphate, against cacao pests in Jamaica, III. 651.

borealis, *Dendroctonus*; *Epilachna*; *Pemphigus*; *Steiroxys*; *Tetranychus*.

boreata, *Cheimatobia*.

Boric Acid, in cockroach poison, II. 72; against olive fly, II. 289.

Borneo, *Coptotermes gestroi* in, I. 355; *Cosmopolites sordidus* on bananas in, II. 506.

borriesi, *Megastigmus*.

bosci, *Gerania*; *Solanophila*.

Bosnia, *Scolytus rugulosus* on plums in, I. 385.

Bossiaea, *Pulvinaria contexta* on, in Australia, III. 503.

Bostrychopsis, on *Dendrocalamus strictus* in India, III. 723.

Bostrychus bicolor (see *Taphrorhychus*).

Bostrychus capucinus, imported into Britain in oak from Odessa, I. 297; boring in metal, I. 43; on vines in France, II. 196.

Bostrychus monachus (see *Apate*).

Boswellia serrata, Cossid in, in India, III. 723.

Bothriothorax flaviscapus, sp. n., parasite of Syrphid in U.S.A., III. 724.

Bothriothorax minor, sp. n., parasite of *Saissetia oleae* in Eritrea, III. 432.

Bothriothorax oleae, sp. n., parasite of *Saissetia oleae* in Eritrea, III. 432.

Bothynoderes betavorus, on beet in Russia and Hungary, II. 90.

Bothynoderes foveicollis, destroyed by rooks in Russia, III. 342.

Bothynoderes (*Cleonus*) *punctiventris*, on beetroot in France, II. 89, 90; bionomics and control of, on sugar-beet in Russia, I. 485, 488, II. 43, 64, 177–179, 180, 465, III. 51, 67, 93, 94, 109, 138, 266, 342, 394, 402, 443, 485, 542, 601; destroyed by rooks in Russia, III. 342.

botrana, *Pezomachus*; *Polychrosis* (*Eudemis*).

Botrytis, infesting *Dendrolimus pini*, II. 222; infesting grapes in Germany, II. 454; infesting *Laphygma frugiperda* in Porto Rico, II. 49; infesting locusts, III. 24; causing stem-rot of vines, II. 683.

Botrytis bassiana, infesting insect pests, I. 316, 524, II. 171, 179, 305, III. 49, 135, 211, 497.

Botrytis cinerea, infesting *Eriophyes ribis*, II. 297.

Botrytis eriophyes, infesting *Eriophyes ribis*, III. 304.

Botrytis necans, infesting *Brachartona catoxantha* in Singapore, II. 583.

Botrytis tenella, infesting *Melolontha melolontha*, III. 14; ineffective against *Melolontha*, II. 524; infesting *Polychrosis botrana*, III. 497.

Botys nubilalis (see *Pyrausta*).

Botys palealis (see *Phlyctaenodes*).

Botys silacealis (see *Pyrausta nubilalis*).

Botys sticticalis (see *Phlyctaenodes*).

boucheanus, *Dibrachys*.

Bougainvillea, not attacked by *Pseudococcus filamentosus* in E. Africa, II. 146.

Bourbon Scale (see *Aspidiotus destructor*).

Bouvardia, *Aleurodes* imported on, into U.S.A., III. 117.

bowreyi, *Pseudischnaspis* (*Aspidiotus*, *Chrysomphalus*).

Box (*Buxus*), *Monarthropalpus buxi* on, in France, I. 74; pests of, in Holland, I. 386, III. 201, 513, 743; *Tarsonemus buxi* on, in Italy, II. 152; insects imported into U.S.A. on, from Holland, II. 186, III. 117, 275, 469, 494; pests of, in U.S.A., I. 3, II. 361, III. 459, 494, 579, 589, 624, 709.

Box-elder (*Acer negundo*), pests of, in U.S.A., I. 225, 241, 280, III. 335.

Box-elder Bug (*Leptocoris trivittatus*), III. 507.

Box-elder Twig-borer (see *Proteopteryx willingana*).

Boxthorn (*Lycium europaeum*), *Phthorimaea operculella* on, II. 401.

Boxwood Leaf-miner (see *Monarthropalpus buxi*).
Boxwood Psylla (see *Psylla buxi*).
bozemani, Pontania.
Brachartona catoxantha, bionomics and control of, on coconut in Malay States, I. 159, II. 134, 480, 583, III. 13; on coconut in Java, III. 311, 714.
Brachistella (see *Abbella*).
Brachyacantha decempunctata, predaceous on *Pseudococcus* in British Guiana, II. 520.
Brachycarenus tigrinus (see *Rhopalus*).
Brachycerus spp., on onions and garlic in Russia, III. 544.
brachycerus, Irbesia.
Brachycolus korotnevi (see *B.noxius*).
Brachycolus noxius, bionomics and control of, on cereals in Russia, I. 357, 358, 364, 460, II. 171, 198, 331, 333, III. 45, 111, 307, 308, 339.
Brachycyttarus subteralbatus, on tea in Ceylon, III. 157.
Brachydeutera argentata, parasitised by *Cyrtogaster glasgowi* in Illinois, II. 307.
Brachylacon (*Lacon*) *murinus*, on onions and garlic in Russia, III. 544; on chicory, I. 256.
Brachylaena discolor, timber of, not readily attacked by termites in Rhodesia, I. 465.
Brachyglottis repanda, Deilemera annulata on, in New Zealand, III. 721.
Brachymena quadripustulata (Four-spotted Tree Bug), on apple in Missouri, III. 180.
brachyptera, Aphelinus.
Brachys aerosa, on oak in Carolina, I. 161.
Brachys ovata, on oak in Carolina, I. 161.
Brachyspiza capensis, destroying insects in Brazil, II. 176.
Brachystegia randii, boring beetles in, in Rhodesia, I. 422.
Brachytarsus variegatus, on velvet beans in Florida, I. 264, III. 327.
Brachytrypes, on rubber in Malaya, II. 133.
Brachytrypes megacephalus, on vines in Italy, II. 418, III. 113.
Brachytrypes membranaceus, on cotton and rubber in Africa, II. 1. 277, 415, III. 166.
Bracon, parasite of *Cydia pomonella* in Russia, I. 366; parasite of *Earias insulana* and *Gelechia gossypiella* in Egypt, II. 507; parasite of *Evergestis extimalis* in Russia, II. 357; parasite of *Aegeria exitiosa* in U.S.A., II. 120.
Bracon abscissor, parasite of *Oria musculosa* in Russia, III. 110, 600.
Bracon brevicornis, parasite of biscuit-infesting insects, I. 292; parasite of *Galleria mellonella*, I. 454, II. 379.
Bracon celer, sp. n., parasite of *Dacus oleae* in S. Africa, II. 346, III. 173, 433.
Bracon colpophorus, parasite of insects infesting Leguminous plants, II. 426.
Bracon dichromus, parasite of *Larinus* and *Myelois*, II. 426.
Bracon discoideus, parasite of *Rhynchites pauxillus* in Russia, III. 336, 533.
Bracon dispar, parasite of *Agriotes segetis* in Argentina, II. 638.
Bracon greeni, parasite of Tineid larvae in India, I. 275.
Bracon guttiger, parasite of *Coleophora laricella* in Europe, I. 63.
Bracon hebetor, imported from N. S. Wales into British Guiana against *Ephestia kühniella*, I. 119.
Bracon hylobii, parasite of *Hylobius abietis* in Scotland, II. 661.
Bracon lagosianus, sp. n., from Lagos, II. 346.
Bracon minutator, parasite of *Aegeria hylaeiformis* in France, II. 622.
Bracon (*Macrodyctium*) *omiodivorum*, parasite of palm and sugar-cane leaf-rollers in Hawaii, III. 682, 757.
Bracon rotundatus, parasite of *Hoplocampa brevis* in Russia, I. 357.
Bracon satanas, II. 404.
Bracon scrutator, parasite of *Polychrosis viteana* in U.S.A., I. 112.
Bracon scutellaris, parasite of insects infesting conifers, II. 426.
Bracon variator, parasite of *Larinus* and *Myelois*, II. 426.
braqii, Myzus.
brahma, Scolytoplatypus.
Bramble Moth (see *Acronycta rumicis*).
Bran, poisoned, against cutworms, I. 84, 194, II. 24, 159, 302, 336, 361, 381, 488, 629, 680; ineffective against *Eleodes omissa*, I. 385; ineffective against *Eriopus floridensis*, II. 92; against *Laphygma frugiperda*, I. 182, 518; against locusts and grasshoppers, II. 65, 159, 249, 302, 542; formulae for using, I. 84, 194, 473, 518, II. 24, 159, 249, 302, 336, 361.
brasiliensis, Biosteres; Dactylopius sacchari.
Brassia, Pulvinaria floccifera on, in Australia, III. 503.

Brassica, Tychea phaseoli on, III. 749.
Brassica campestris, pests of, in Russia, I. 211, 396.
Brassica esculenta, Phyllotreta nemorum on, in Russia, I. 211.
Brassica napus (see Turnip).
Brassica nigra, Limonius californicus on, in California, II. 303.
Brassica oleracea (see Cabbage).
Brassica oleracea var. *silvestris, Cydia leplastriana* on, in Italy, II. 347.
Brassica olifera, Phyllotreta nemorum on, in Russia, I. 211.
Brassica rapa (see Rape).
Brassica sinapis (see Charlock).
Brassica vapifera, Phyllotreta nemorum on, in Russia, I. 211.
brassicae, Aphidius ; *Aphis* ; *Barathra* (*Mamestra*) ; *Chortophila* (*Anthomyia, Pegomyia, Phorbia*); *Meligethes* ; *Perrisia* (*Cecidomyia*) ; *Phytometra* (*Autographa*); *Pieris.*
brassicariae, Pimpla.
Brassolis sophorae (Coconut Butterfly), bionomics and control of, on coconut in British Guiana, II. 569, III. 175, 591, 652 ; on coconut in Trinidad, III. 368.
Braula caeca (Bee Louse), parasite of bees in Europe and U.S.A., I. 275, II. 564.
Brazil, parasites of *Anastrepha fraterculus* from, I. 321 ; Argentine ant in, I. 325 ; *Brachyspiza capensis* destroying insects in, II. 176 ; *Cosmopolites sordidus* on bananas in, II. 506 ; bionomics of *Cycloneda sanguinea* in, III. 169 ; *Eriopus floridensis* on ferns in, II. 92 ; fruit-flies in, I. 390, III. 387 ; *Lepidosaphes ulmi* in, I. 167 ; locusts of, I. 341 ; control of *Mocis repanda* in, II. 627 ; *Stenoma anonella* on custard apple in, III. 388 ; weevils infesting bamboo in, III. 306, 696 ; insect pests from, imported into U.S.A., III. 455, 469 ; pests of citrus, etc. in, II. 173–176 ; pests of coconut in, III. 695 ; pests of coffee in, II. 205 ; caprification of figs in, I. 341 ; pests of rubber in, I. 351, II. 193.
Breadfruit (see *Artocarpus incisa*).
Bregmatothrips gracilis, sp. n. on grasses in Florida and Louisiana, III. 631.
Bremia, destroying Aphids, II. 79, 80, 81.
bremii, Ceratitis.
brenskei, Anisoplia aprica.
brevicaudis, Megastigmus.
breviceps, Hilda.
brevicollis, Cryptothrips ; *Dociostaurus* (*Stauronotus*) ; *Perilitus* ; *Trirhabda.*
brevicomis, Dendroctonus.
brevicornis, Bracon ; *Lygaeonematus.*
Brevipalpus obovatus, on tea, citrus and camphor in Ceylon, II. 306, 597 ; on tea in India, III. 489.
brevipennis, Proctacanthus.
brevipunctatus, Eriophyes.
brevirostris, Alcides ; *Temnorrhinus.*
brevis, Aphis ; *Camptobrochis* ; *Crossotarsus* ; *Dacus* ; *Glypta* ; *Hoplocampa.*
brevisiphona, Aphis.
brevistylus, Dacus.
breviuscula, Chaetocnema (*Plectroscelis*) ; *Psylliodes.*
briardi, Polysticta.
Bridelia micrantha, food-plant of *Anaphe* in Africa, I. 33, II. 548.
Briers, not attacked by *Lymantria dispar* in U.S.A., III. 669.
Brindled Beauty Moth (see *Phigalia pedaria*).
britannica, Metallonoidea.
britannicus, Aspidiotus ; *Aphidencyrtus aspidioti* ; *Coccophagus.*
Brithys crini (*Glottula dominica*), on lily in Ceylon, III. 157.
Brithys pancrati, on lily in Zanzibar, III. 125.
British Columbia, bionomics of *Otiorrhynchus ovatus* in, I. 92, III. 7 ; beneficial insects, in, I. 84, III. 61 ; miscellaneous pests of, I. 47, 83, 86, 87, 90, II. 21, 22, 24, 674, 676, 677, III. 71, 72, 269 ; forest pests in, I. 231, 407, III. 2, 19 ; fruit pests and their control in, I. 47, 84, 179, 298, 413, II. 22, 23, 433, 677 ; pests of hops in, I. 240, 241 ; insectivorous habits of mole in, III. 407 ; cost of manufacturing lime-sulphur in, II. 21.
British Guiana, miscellaneous pests in, I. 118, 130, 139, 343, 521, II. 92, 416, 568, 646, III. 590 ; cacao pests in, III. 663 ; pests of coconut in, I. 57, 139, II. 57, 417, 569, III. 591, 652 ; pests of rice in, I. 139, 318, II. 519, 568 ; pests of rubber in, II. 55, 417, 568 ; sugarcane pests and their parasites in, I. 139, 319, 521, II. 15, 30, 57, 58, 62, 339, 417, 430, 497, 519, 520, 568, III. 26, 27, 383, 590, 650 ; Coccidae in, II. 276, 416, III. 750 ; predaceous Coccinellids in, II. 520 ; parasitic Hymenoptera in, I. 343, II. 497, 520, III. 675, 724 ; bionomics of *Mocis repanda* in, II. 519 ; legislation against plant pests in, III. 175.

British Honduras, froghoppers in, II. 62.
British Isles, bionomics of *Amblyspatha ormerodi* on clover in, I. 242; Aphids of, I. 33, 77, II. 8, 55, 271, 332, 618, 655, 661, III. 633, 749, 762; new Chalcidoid Hymenoptera in, III. 675, 724; bionomics of *Chortophila brassicae* in, III. 616–618; scale-insects and their control in, I. 188, 237, 243, II. 101, 628, 705, 725, III. 277, 346, 563, 753; *Ephestia kühniella* damaging biscuits in, I. 293; bionomics of *Eriophyes ribis* on *Ribes nigrum* in, III. 303; bionomics of *Pegomyia hyoscyami* in, II. 616, 617; bionomics and control of *Plutella maculipennis* in, III. 550, 745; economic value of *Talpa europea* in, II. 706; thrips in, II. 395, 488; new Tortricidae in, III. 277; economic importance of woodlice in, II. 597; insect pests from, imported into U.S.A., III. 117, 354, 469; pests of carnations in, III. 14; pests of cereals in, I. 242, 342, II. 285, 639; pests of chrysanthemums in, III. 746, 747; forest pests in, I. 91, 297, 463, II. 54, 163, 168, 192, 237, 497, 619, 661, III. 190, 406, 459, 559, 676, 677, 718, 762; fruit pests in, I. 161, 236, 237, II. 8, 237, 238, 419, 627, 628, 658, 659, III. 74, 80, 277, 303; pests of narcissus and other bulbs in, II. 88, 246, 633; pests of parsnips in, I. 43; miscellaneous insect pests in, I. 36, 318, 387–388, 410, 505, II. 8, 9, 26, 88, 377, 497–499, 562, 563, 564, 619, 627, 655, 656, III. 1, 9, 74, 97, 102, 159, 277, 279, 285, 287, 460, 500, 501, 564, 566, 659, 675, 715, 762; diseases and enemies of bees in, I. 523, II. 379, 564; use of lime-sulphur spray in, II. 454; experiments with nicotine extracts in, I. 110; winter cover washes in, III. 286.
British West Indies (see West Indies).
britteni, Rhopalosiphum.
Broad Bean (*Vicia faba*), Aphids on, in Britain, I. 78; *Kakothrips robustus* on, III. 279.
Broccoli, *Chortophila brassicae* on, III. 1.
bromeliae, Diaspis; *Chrysomphalus* (*Aspidiotus*); *Pseudococcus.*
Bromius vitis (see *Adoxus*).
Bromus, Aphis avenae on, II. 696.
Bromus unioloides, Diabrotica duodecimpunctata on, I. 430.
Bromus willdenowii, Toxoptera graminum on, in S. Africa, II. 153.
Brontispa froggatti (Coconut Hispid) on coconut in the South Sea Islands, II. 2, 690, III. 27, 754.
Bronze Apple Borer (see *Magdalis aenescens*).
Bronze Beetle, control of, in New Zealand, III. 79.
Bronze Birch Borer (see *Agrilus anxius*).
Bronze Flea-Beetle (see *Haltica evicta*).
Broom (*Sarothamnus*), *Cneorrhinus plagiatus* on, in England, III. 501.
Broom-corn (see Sorghum).
Broscus cephalotes, destroying Elaterids in Russia, I. 485, II. 466 III. 541.
Broscus punctatus, preying on *Agrotis ypsilon* in India, III. 145.
Broussonetia papyrifera, food-plant of *Aulacaspis pentagona*, I. 221; *Pseudaonidia oreodoxae*, sp. n., on, in Ceylon, III. 168.
Brown Apricot Scale (see *Eulecanium armenaicum*).
Brown Cutworm (see *Nephelodes emmedonia*).
Brown Day Moth (see *Pseudohazis eglanterina*).
Brown Fungus (see *Aegerita webberi*).
Brown Grape Aphis (see *Macrosiphum viticola*).
Brown Hard-back (see *Phytalus* and *Lachnosterna*).
Brown Lacewing (see *Hemerobius pacificus* and *Sympherobius angustus*).
Brown Leaf-hopper (see *Delphax oryzae*).
Brown Locust (see *Locusta pardalina*).
Brown Mite (see *Bryobia pretiosa*).
Brown Rot (see *Bacillus solanacearum*).
Brown Scale (see *Saissetia hemisphaerica*).
Brown-tail Moth (see *Euproctis chrysorrhoea*).
Bruchobius colemani, sp. n., parasite of *Bruchus chinensis* in Bangalore, II. 288.
Bruchobius laticeps, sp. n., parasite of *Bruchus quadrimaculatus* in Bangalore, II. 288.
Bruchocida orientalis, sp. n., parasite of *Bruchus chinensis* in Bangalore, II. 288.
Bruchocida vuilleti, sp. n., in Senegal, II. 288.
Bruchophagus funebris (Clover Seed Chalcid), bionomics and control of, on clover and lucerne in Canada and U.S.A., I. 180, II.

114, 664, III. 69, 151, 185, 267 426, 565, 763; on clover in Russia, III. **8.**

Bruchophagus (*Eurytoma*) *gibbus*, on clover in Russia, III. **8.**

Bruchus (*Laria*), attacking peas and beans in Barbados, III. **504;** in forest seeds from Ceylon, III. **289;** *Bracon colpophorus* parasitic on, II. **426.**

Bruchus atomarius, on vetches in Russia, III. **47.**

Bruchus chinensis (Cowpea Bruchus), on cotton in Africa, II. **2;** on cowpeas and millet in E. Africa, I. **247, 414,** II. **283;** parasites of, in Bangalore, II. **288;** on cowpeas in Egypt, II. **505;** intercepted in Hawaii in beans from Japan, III. **657;** on peas and beans in the West Indies, II. **87,** III. **626.**

Bruchus granarius, a pest of lentils, I. **123.**

Bruchus lentis, III. **460;** a pest of lentils, I. **123,** III. **47;** in Russia, III. **393.**

Bruchus obsoletus (see *B. obtectus*).

Bruchus obtectus, on beans in East Africa, I. **247;** on beans in Britain, III. **460;** on beans in U.S.A., I. **476,** II. **160,** III. **262.**

Bruchus ornatus, on *Dolichos lablab* in East Africa, I. **247, 414.**

Bruchus pallidicornis, a pest of lentils, I. **123.**

Bruchus (*Mylabris*) *peruanus*, on cotton in Peru, III. **273.**

Bruchus pisi (see *B. pisorum*).

Bruchus pisorum (Pea Bruchus), in Holland, I. **385;** on peas in Italy, III. **124;** on peas in France, III. **694;** on peas etc. in Russia, II. **501, 503,** III. **50, 205, 393, 402, 482, 601;** on peas imported into Scotland, II. **498;** bionomics of, in U.S.A., II. **160,** III. **262, 762.**

Bruchus pruininus, in locust and acacia seeds in U.S.A., III. **85.**

Bruchus quadrimaculatus, on pigeon peas, etc. in the West Indies, II. **87,** III. **626;** parasitised by *Bruchobius laticeps*, II. **288;** attacked by *Pediculoides ventricosus*, III. **566.**

Bruchus rufimanus, control of, in stored beans, II. **693;** in broad beans in England, II. **97;** in imported beans in Scotland, II. **498.**

Bruchus sinensis (see *B. chinensis*).

brui, *Thripoctenus.*

brumata, *Cheimatobia.*

Brumus octo-signatus, predaceous on Aphids in Russia, III. **220,**

Brumus suturalis, destroying *Psylla isitis* in India, I. **45;** destroying *Tetranychus bioculatus*, in India, I. **508.**

brunnea, *Parandra*; *Serica.*

brunneipes, *Opius.*

brunneri, *Aegeria* (*Sesia*).

brunneum, *Anobium.*

brunneus, *Cylas*; *Gonatocerus*; *Lyctus.*

brunnicornis, *Herpestomus* (*Ichneumon*).

brunnipes, *Melanotus.*

Bryobia (Red Spider), measures against, in S. Australia, II. **584,** III. **362;** on apples in Britain, I. **237;** in British Columbia, I. **413;** in California, I. **269;** food-plants of, in Egypt, II. **505;** on almond in U.S.A., III. **120;** and *Tetranychus*, differences between larvae of, II. **169.**

Bryobia gloriosa (see *B. pretiosa*).

Bryobia nobilis (see *B. pretiosa*).

Bryobia pratensis (see *B. pretiosa*).

Bryobia pretiosa (Brown Mite), III. **63;** on fruit in Australia, III. **492;** bionomics and distribution of, in Canada and U.S.A., I. **405,** II. **169, 245, 439, 536, 553, 664, 676, 707,** III. **275, 493, 557, 566;** on pears etc. in Holland, III. **201;** on gooseberries in Norway, III. **254;** on gooseberries in Russia, III. **41;** measures against, II. **247, 344, 708;** synonomy of, II. **169,** III. **201.**

Bryobia ribis (see *B. pretiosa*).

Bryobia speciosa (see *B. pretiosa*).

Bryodema tuberculatum, *Sarcophaga* infesting, in Russia, III. **636;** in Siberia, III. **53.**

bryoniae, *Agromyza*; *Perrisia* (*Dasyneura*).

bubalus, *Ceresa.*

Bubulcus coromandus, destroying locusts in the Philippines, I. **68.**

Bucculatrix canadensisella, on birches in Connecticut, I. **53;** on pine in Ontario, I. **407.**

Bucculatrix thurberiella, on cotton in Arizona, III. **513.**

Bucentes (*Siphona*) *cristata*, parasite of *Tipula maxima*, III. **466.**

bucephala, *Cnephalia*; *Phalera.*

bucephaloides, *Phalera.*

Buckthorn (*Rhamnus frangula*), *Clysia ambiguella* on, in Russia, III. **210.**

Buckthorn Plantain (*Plantago lanceolata*), *Crambus caliginosellus* on, in Europe, II. **524.**

Buckwheat (*Fagopyrum esculentum*), pests of, in Russia, III. **399, 479, 481, 487, 610;** not attacked by *Oscinella frit* in Russia, II. **5.**

Bud Moth (see *Eucosma ocellana*).
Buddleia lindleyana, food-plant of *Aulacaspis pentagona* in Italy, I. 222.
Buffalo Carpet Beetle (see *Anthrenus scrophulariae*).
Buffalo Grass, *Antonina purpurea australis* on, in Australia, III. 364.
Buffalo Tree-hopper (see *Ceresa bubalus*).
Bufo agua, destroying *Diaprepes abbreviatus* in Barbados, II. 532.
Bufo marinus, destroying *Laphygma frugiperda* in British Guiana, I. 521; destroying froghoppers in Trinidad, II. 62.
Bulaea lichatschovi, destroying Aphids in Russia, III. 220.
Bulb Eelworm (see *Tylenchus devastatrix*).
Bulb Mite (see *Rhizoglyphus hyacinthi*).
Bulgaria, *Eurytoma amygdalis* in almond seeds in, II. 348; *Psalidium maxillosum* on vines in, II. 465; *Psylliodes attenuata* on hops in, I. 342.
Bull Pine (see *Pinus ponderosa*).
bulla, Hormomyia.
Bullace (see *Prunus insitia*).
Bullfinch, considered an injurious bird, I. 305.
Bullrush (see *Typha latifolia*).
Bulrush, Small (*Typha angustifolia*), *Phthorimaea operculella* on, II. 401.
Bumble Bees, infected with *Nosema bombi*, III. 169.
bumeliae, Prociphilus.
Bunch Grass (see *Andropogon scoparius*).
Bunias orientalis, Phyllotreta nemorum on, in Russia, I. 211.
Bunya Pine (see *Araucaria*).
buoliana, Rhyacionia (*Evetria, Retinia*).
Bupalus piniarius, in Austria, II. 482; bionomics of, in Germany, II. 147, 235, 257; bionomics of, in Holland, III. 198; bionomics of, in Russia, II. 215, III. 48, 398, 607.
buphthalma, Gymnogaster.
Buprestis apricans, on pines in N. Carolina, I. 160.
Buprestis quadripuncta (see *Anthaxia*).
buquetiana, Armatosterna.
Bur Clover (see *Medicago hispida* and *M. denticulata*).
Burdock (*Lappa communis*), *Xanthoecia flavago* (*Gortyna ochracea*) on, in Britain and France, I. 410, 434; Gelechiid moth on, in Canada, III. 72; grape leafhopper on, in U.S.A., I. 277.
Burgundy Mixture, formulae for, I. 237, 294, II. 658; addition of adhesives to, I. 548, II. 681; against *Melasoma* (*Lina*) *populi*, I. 334.
burkilli, Pulvinaria.
Burma, *Caprinia conchylalis* on *Funtumia elastica* in, II. 191, 192; *Eurydactylus sexspinosus* in coffee and rice in, I. 351.
Burnished Brass Moth (see *Phytometra orichalcea*).
Burr Oak, *Oecanthus angustipennis* on, in U.S.A., II. 674.
burrowi, Pemphigus.
Burrowing Scale (see *Howardia biclavis*).
Bursaria spinifera, Ceroplastes ceriferus on, in Australia, III. 503.
bursarius, Pemphigus.
bushnelli, Rhyacionia (*Evetria*).
Busseola fusca, bionomics of, on maize in Africa, I. 144, II. 107, 277, 299, III. 125, 166, 503.
Busseola sorghicida, on sorghum in East Africa, I. 415.
Bustard, destroying locusts, II. 574.
Butterfly Pea, *Tetraonyx quatuormaculatus* on, in N. Carolina, I. 243.
Butternut (see *Juglans cinerea*).
Button Quail, destroying locusts in the Philippines, I. 68.
buxi, Monarthropalpus (*Cecidomyia*); *Psylla*; *Tarsonemus.*
Buxus (see Box).
Buzura (*Biston*) *suppressaria*, on tea in India and the Far East, II. 490, III. 489.
Buzzard, destroying cockchafers, II. 148.
Bycticus betulae (*Rhynchites betuleti*), in vineyards in France, I. 228, 235, II. 608; on vines in Italy, II. 418, III. 112, 124, 387; not seriously damaging vines in the Palatinate, II. 539; bionomics of, in orchards in Russia, II. 42, 211, 341, 467, 627, III. 50, 51, 130, 222, 225, 393, 399, 402, 535, 601, 602.
Bycticus betulae var. *violaceus*, on fruit trees in Russia, III. 47.
Bycticus populi, in Russia, III. 50.
Byturus fumatus, on raspberries in Russia, III. 223, 440; on raspberries in Switzerland, I. 345.
Byturus tomentosus (Raspberry Beetle), on raspberries in England, II. 563; bionomics and control of, in Russia, I. 205, II. 265, 342, 368, 480, III. 46, 66, 106, 204, 235, 311, 393, 440, 441, 442.

C.

Cabbage (*Brassica oleracea*), pests of, in E. Africa, I. 246, 415; pests of, in S. Africa, II. 48, 235; control of pests of, in Australia, I. 192, 548, III. 6; leaf-cutting ants on, in Brazil, II. 28; pests of, in the British Isles, I. 387, II. 8, 655, III. 277, 460, 500, 660, 715; pests of, in Canada, I. 299, 400, II. 24, 664, 665, 676, III. 70–71, 551, 552; *Bagrada picta* on, in Ceylon, I. 89; pests of, in Denmark, III. 246, 699; pests of, in France, I. 68, 227, II. 420, III. 1; pests of, in Hawaii, III. 363; pests of, in Holland, I. 385, 386, II. 641, III. 200; pests of, in Italy, II. 347, III. 59, 124; pests of, in Norway, III. 107, 346; pests of, in Nyasaland, II. 278; *Prodenia litura* on, in the Philippines, I. 482; *Pieris monuste* on, in Porto Rico, III. 477; pests of, in Portugal, I. 313; pests of, in Russia, I. 210–212, 460, 487, 492, 493, 499, 500, 536, 537, II. 42, 43, 198, 248, 266, 340, 341, 355, 356, 357, 480, 521, 614, 648, 716, III. 45–47, 50, 67, 74, 100, 208, 218, 220, 311, 338, 340, 343, 389, 390, 401, 403, 443, 538, 601, 610; pests of, in U.S.A., I. 40, 130, 476, II. 4, 115, 159, 161, 361, 465, III. 16, 85, 192, 270, 335, 471, 472, 512.

Cabbage Aphis (see *Aphis brassicae*).

Cabbage Bug, Harlequin (see *Murgantia histrionica*).

Cabbage Curculio (see *Ceuthorrhynchus rapae*).

Cabbage Fly (see *Chortophila brassicae*).

Cabbage Looper (see *Phytometra brassicae*).

Cabbage Louse (see *Aphis brassicae*).

Cabbage Maggot (see *Hylemyia antiqua*).

Cabbage Moth (see *Crocidolomia binotalis*).

Cabbage Palm (see *Oreodoxa oleracea*).

Cabbage Root Maggot (see *Chortophila brassicae*).

Cabbage Tree (*Cordyline australis*), III. 721.

Cabbage Tree Maggot (see *Venusia verriculata*).

Cabbage Webworm (see *Hellula undalis*).

Cacao (*Theobroma cacao*), pests of, in Tropical Africa, I. 49, 247, 414, II. 59, 107, 141, 203, 283, 575, 592, 634, 670–672, III. 165, 167, 288, 528, 663, 752; pests of, in British Guiana, II. 417, 569, III. 591; pests of, in Ceylon, I. 89, II. 513, 643, 644, 654, III. 62, 123, 157, 300; pests of, in the Far East, I. 3, 4, 56, 57, 350, II. 535, III. 311, 663; legislation against pests of, in the Gold Coast, II. 278; pests of, in the Philippines, II. 192, III. 137; pests of, in Samoa, II. 26, 27, 267, 555; fertilisation of, in the Straits Settlements, II. 98; pests of, in the West Indies, I. 98, 198, 122, 253, 254, 263, 270, 425, II. 69, 87, 104, 130, 146, 284, 324, 459, 602, 646, 693, III. 14, 137, 276, 368, 582, 651, 679; review of insect pests of, I. 548, II. 316, III. 660–663; *Tineopsis theobromae* in beans of, I. 306.

Cacao Ant (see *Dolichoderus bituberculatus*).

Cacao Bark Sapper (see *Salhbergella*).

Cacao Beetle (see *Stirastoma depressum*).

Cacao Fruit-fly (see *Ceratitis punctata*).

Cacao Leaf Beetle (see *Adoretus hirtellus*).

Cacao Mosquito (see *Helopeltis*).

Cacao Moth (see *Acrocercops cramerella*).

Cacao Thrips (see *Heliothrips rubrocinctus*).

Cacao Weevil (see *Alcides leeuweni*).

Cacochroa decorticata, on sugar-cane in Queensland, III. 491.

Cacoecia (*Archips*) *argyrospila* (Fruit tree Leaf-roller), bionomics and control of, in Canada and U.S.A., I. 225, 281, 290, 425, 510, II. 14, 599, 673, 675, III. 259, 414, 446, 494, 554, 758.

Cacoecia cerasivorana, on apples in British Columbia, II. 675.

Cacoecia costana, bionomics of, on vines in France, I. 221, 228, 429, II. 91, 405; not on vines in the Palatinate, II. 539; on vines in Russia, III. 209.

Cacoecia crataegana (see *Tortrix*).

Cacoecia lecheana, on oaks in England, II. 619.

Cacoecia piceana (see *Tortrix*).

Cacoecia podana (see *Tortrix*).

Cacoecia postvittana (see *Tortrix*).

Cacoecia rosaceana (Oblique-banded Leaf-roller), in orchards in Canada and U.S.A., I. 136, 290, II. 677.

Cacoecia rosana, bionomics of, in New Haven, II. 188.

Cacoecia xylosteana, on oaks in England, II. 619, 620; on fruit trees in France, III. 496; on oaks in Portugal, I. 313.

cacti, Chilocorus.
Cactoblastis (*Zophodia*) *cactorum* (Argentine Moth Borer), on cactus in Argentina, III. 126.
Cactophagus, on prickly pear in Argentina, III. 127.
cactorum, Cactoblastis (*Zophodia*).
Cactus, insects infesting, in U.S.A., I. 78, III. 126; insects recommended to destroy, in Queensland, III. 126; solution of, as an adhesive in arsenical sprays, III. 295; (see *Opuntia*).
Cactus Aphis (see *Aphis gossypii*).
Cactus Midge (see *Cecidomyia opuntiae*).
Cacus oecanthi, parasite of *Oecanthus fasciatus* in U.S.A., II. 674.
Cadamustus typicus, on coconut in Singapore, III. 724.
caeca, Braula.
caelatus, Ips.
Caenacis parviclava, parasite of vine moths, II. 607, III. 211.
Caenophanes, parasite of *Oncideres putator* in U.S.A., III. 475.
Caesalpinia japonica, food-plant of *Aulacaspis pentagona*, I. 221.
Caesalpinia pulcherrima, not attacked by *Pseudococcus filamentosus* in E. Africa, II. 146.
caesia, Gastroidea.
caespitum, Tetramorium.
Caffaro paste, as an insecticide, III. 347, 429.
cahiritella, Ephestia (see *E. cautella*).
caja, Arctia (*Chelonia*); *Apanteles.*
cajae, Bacillus.
Cajanus indicus (see Pigeon Pea).
Cakili edentula, Cleonus calandroides on, in Maryland, III. 266.
Calaboa, Prodenia litura on, in the Philippines, I. 482.
calacladophora, Eriophyes.
Caladium, Pulvinaria darwiniensis on, in Australia, III. 503.
Calamintha, Chloridea obsoleta on, in U.S.A., III. 471.
Calamis, Brachartona catoxantha on, in Singapore, II. 583.
Calamistes fusca (see *Busseola*).
Calamistes praepallens, on maize in Nigeria, II. 107.
calamistis, Sesamia.
Calandra (Grain Weevils), in maize in New South Wales, III. 24; destroyed by thrushes, II. 585.
Calandra granaria (Corn Weevil, Grain Weevil), in cereals in Algeria, II. 233; declared a pest in British Columbia, I. 48; in stored cereals in Canada and U.S.A., I. 115, II. 93, 537, III. 175, 245, 262; in cereals in France, III. 694; in stored barley and acorns in Germany, I. 340, 545; in stored grain in Russia, I. 539, II. 34, 40, 41, 503, 515, III. 92, 129, 487, 601; in cereals in Scotland, I. 387; control of, in Queensland, I. 21; measures against, III. 175, 375, 488; infesting biscuits, I. 292.
Calandra oryzae (Rice Weevil), in stored grain in Tropical Africa, I. 414, II. 117, 142, III. 166; intercepted in maize in California, III. 626; in stored cereals in Canada and U.S.A., I. 115, II. 93, 382, 573, III. 175, 262, 465; in Hawaii, III. 411; in rice in India, II. 67; in stored grain in Russia, II. 40, III. 399; in St. Vincent, III. 411; in imported maize in Scotland, I. 387, II. 498; in army biscuits, I. 292; effect of heat on, II. 703; *Pediculoides ventricosus* destroying eggs of, II. 573; remedies against, II. 204, 382, 703, III. 175, 375, 381.
Calandra taitensis (see *Diocalandra frumenti*).
calandroides, Cleonus.
Calaphis betulaecolens, on paper birch in California, III. 85.
calcarata, Saperda.
calcaratus, Phyllobius; Syagrus.
calcator, Heteropelma.
calceatus, Emphytus; Ophonus (*Harpalus, Pardileus*).
calceolariae, Pseudococcus (*Dactylopius*).
calcitrator, Collyria.
Calcium Arsenate, formula for, II. 552, III. 737; properties of, as an insecticide, III. 447.
Calcium Arsenite, formulae for, II. 54, 77, 162, 236, 553, III. 324, 390, 514; as a substitute for Paris green, III. 108; against *Laphygma exempta*, III. 359.
Calcium Bisulphide, against *Aspidiotus ostreaeformis*, III. 100.
Calcium Carbide, against *Anomala vitis*, II. 608; against ants, II. 624; against *Eriosoma lanigerum* II. 177, 293; against *Gryllotalpa* in Russia, III. 101; against pests of vegetables in Queensland, I. 191.
Calcium Chloride, against *Calandra granaria*, III. 129.
Calcium Cyanamide, ineffective against *Crambus caliginosellus*, II. 525; formula for, against *Colaspidema atrum*, II. 58.
Calcium Hydroxide, and sulphur, reaction of, II. 544.
Calcium Oxide, percentage of, in lime-sulphur, II. 97.

Calcium Pentasulphide, proportion of, in lime-sulphur, II. 543.
Calcium Polysulphide, against orchard pests, II. 230, 673; against scale-insects, II. 199, 545, III. 430.
Calcium Sulphide, formula for, against *Aulacaspis pentagona*, II. 207; against sooty fungus of olive, III. 257.
calida, Mylabris (*Zonabris*).
Calidea, on coffee in E. Africa, II. 447.
Calidea apicalis, on cotton in Africa, I. 246, 415, II. 2, 581.
Calidea bohemani, on cotton in Africa, II. 2; on coffee in E. Africa, I. 107, 415.
Calidea dregei, on cotton in E. Africa, I. 246, 415.
Calidea rufopicta, I. 246.
calidella, Ephestia.
calidum, Calosoma.
California, Aphids of, I. 384, II. 208, 251, 527, 582, III. 686; Aphid-destroying Coccinellids in, III. 760; Hymenopterous parasites in, I. 36, III. 151, 724; importation of beneficial insects into, II. 137, 286, 298, 554, III. 150, 738; measures against mites in II. 151; *Phthorimaea operculella* on potatoes in, I. 102, 428, II. 280, 302, 344, III. 418; scale-insects and their natural enemies in, I. 167, 168, 171, 218, 307, 309, 383, 427, II. 245, 247, 434–437, 585, 600, III. 738; *Siphona plusiae* parasite of *Phryganidia californica* in, III. 306; pests of cereals in, I. 383, II. 247; pests of cotton in, I. 353; dried fruit pests in, III. 575, 684; pests of hops in, I. 240, 241; pests of lucerne etc. in, I. 177, 339, II. 115, 245, III. 153, 763; orchard pests and their control in, I. 86, 175, 176, 178, 269, 324, 332, 364, 383, 384, 385, 418, 425, 426, 427, 510, 528, II. 3, 113, 116, 152, 244, 245, 286, 344, 438, 439, 663, 706, III. 77, 120, 121, 136, 141, 149, 150, 274, 275, 330, 461, 493, 511, 556, 557, 585, 621, 623, 624, 625, 653, 687, 689, 738; miscellaneous pests in, I. 117, 417–418, 426, 427, 428, II. 113, 114, 115, 116, 117, 244, 246, 247, 248, 287, 438, 439, 553, 554, 555, 559, 662, 663, 707, 708, III. 11, 13, 15, 16, 85, 121, 150, 275, 348, 419, 493, 557, 625, 687, 689, 690, 738; importation of potatoes from, into Canada, prohibited, II. 273; avocado culture in, II. 13; natural enemies of spiders and mites in, I. 143, 144, II. 33; destruction of insects by birds in, I. 17, III. 559; Government analyses of insecticides in, II. 7; formulae for insecticides used in, III. 529; quarantine measures and interception of pests in, I. 217, 269, 426, 428, II. 113, 115, 435, 598, 706, III. 120, 274, 275, 420, 494, 555, 558, 624, 625, 657, 690, 739.
California Black Walnut (see *Juglans californica*).
California Grape-fruit Worm (see *Adoxus obscurus*).
California Mixture, and lead arsenate, III. 741; against insect pests in Russia, II. 714, III. 119, 396, 604; against mites, II. 642, 701; against scale-insects, II. 298, III. 81, 215, 442; preparation of, III. 215, 396.
California Oak Moth (see *Phryganidia californica*).
California Tussock Moth (see *Hemerocampa vetusta*).
California Wireworm (see *Limonius californicus*).
Californian Red Scale (see *Chrysomphalus aurantii*).
californica, Chrysopa; *Coccinella*; *Malacosoma*; *Monellia*; *Phryganidia*; *Phytometra* (*Autographa, Plusia*); *Tomocera*; *Vanessa.*
californicus, Aspidiotus; *Hemerobius*; *Limonius*; *Pemphigus*; *Prionus*; *Tenuipalpus.*
californicus obscurus, Homalotylus.
caliginosellus, Crambus.
Caligo illioneus, bionomics of, on sugar-cane in Br. Guiana, I. 522.
Caliroa cerasi (see *Eriocampoides limacina*).
caliroae, Homalomma; *Polypterus*; *Trematopygus.*
callias, Cryptocephalus.
callichroma, Diaulinopsis.
Callicratides rama, on tea and cotton in Ceylon, III. 157.
Callidium sanguineum, boring in metal, I. 43.
Callidium unifasciatum, on vines in France, II. 195, 196.
Callidium violaceum, in timber in Norway, III. 697.
Calliephialtes, parasite of *Acrocercops cramerella* in Java, III. 311; inefficient against *Cydia pomonella* in California, II. 554.
Calliephialtes comstocki (see *C. messor*).
Calliephialtes grapholithae, in U.S.A., III. 691.
Calliephialtes messor, parasite of *Cydia pomonella*, I. 363; bionomics of, when introduced into California, II. 137.

Calliephialtes pusio (see *C. messor*).
Calliephialtes thurberiae, sp. n., parasite of *Anthonomus grandis thurberiae* in U.S.A., III. **691.**
Calliephialtes xanthothorax (see *C. grapholithae*).
calligraphus, Ips.
Callimome, parasite of *Smicronyx fulvus* in Colorado, III. **753**; parasite of *Mayetiola destructor* in U.S.A., I. **528.**
Callimorpha hera, on lettuce in France, I. **504.**
Callipepla squamata, destroying *Diabrotica duodecimpunctata* in U.S.A., I. **431.**
Calliptamus, infected with *Coccobacillus* in Argentina, II. **462.**
Calliptamus femur-rubrum (see *Melanoplus*).
Calliptamus (*Caloptenus*) *italicus* (Italian Locust), bionomics of, in Italy, III. **40, 113, 497**; bionomics of, in Russia, I. **357, 535, 542,** II. **33, 38, 73, 170, 197, 474, 508, 509, 614, 716,** III. **51, 92, 109, 239, 242, 339, 401, 437, 482, 536, 537, 636**; infested with *Empusa grylli*, II. **718**; natural enemies of, I. **535,** II. **474,** III. **40.**
Callipterus juglandicola, on walnuts in Russia, III. **45.**
Callipterus juglandis, on walnuts in Russia, III. **45.**
Callipterus ononidis, food-plants of, in U.S.A., III. **114, 749.**
Callipterus platani, on sycamore in England, III. **633.**
Callipterus trifolii, probably identical with *C. ononidis*, III. **114.**
Callirrhipis femorata, on coconuts in the South Sea Islands, II. **3.**
Callirrhoë involucrata, Anthonomus grandis on, in U.S.A., II. **582,** III. **330.**
Callirrhoë pedata, Anthonomus grandis on, in U.S.A., II. **582.**
Callispa kilimana, on maize in E. Africa, I. **414.**
Callistenes, destroying locusts in Turkestan, II. **509.**
Callochroa vernata, synonym of *Euclea indetermina*, II. **93.**
Callochroa viridis, synonym of *Euclea indetermina*, II. **93.**
Calloödes grayanus, food-plants of, in Queensland, III. **491.**
callopista, Tortrix.
Callopistria floridensis (see *Eriopus*).
callosa, Promecotheca.
Callosamia promethea, Perilloides scrieventris predaceous on, in Canada, II. **665.**
Callostoma, destroying locusts in Egypt, III. **429.**
Callostoma desertorum, destroying *Dociostaurus maroccanus* in Turkestan, II. **509.**
callosus, Sphenophorus; *Sphingonotus.*
Calluna vulgaris, Aphis callunae on, in Britain, III. **762**; *Aspidiotus bavaricus* on, in Britain, I. **188.**
callunae, Aphis.
Calocampa exoleta (see *Xylina*).
Calocoris angustatus (Cholam Bug), in Madras, III. **174.**
Calocoris bipunctatus, on potatoes in Denmark, III. **247**; on potatoes in England, II. **287.**
Calocoris chenopodii, on chrysanthemums in France, II. **130**; in Russia, III. **7.**
Calocoris norvegicus, on potatoes in Denmark, III. **699.**
Calomel, against termites in South Africa, I. **477.**
Calophyllum inophyllum (Ball Kamani), *Pseudococcus filamentosus* on, in E. Africa, II. **146**; *Ceratitis capitata* on, in Bermuda and Hawaii, III. **171, 412.**
Calophyllum triophyllum, Eucalymnatus tessellatus on, in the Seychelles, II. **566.**
Caloplusia ignea, on *Helianthus lenticularis* in Colorado, III. **753.**
Caloptenus italicus (see *Calliptamus*).
Calosoma, imported into Connecticut against gipsy moth, III. **369**; parasitised by *Sarcophaga* spp., III. **452**; destroying noxious insects, II. **262,** III. **369, 466, 553, 701.**
Calosoma alternans, predaceous on *Laphygma frugiperda*, I. **182,** II. **49,** III. **477.**
Calosoma calidum, parasitised by *Biomyia georgiae* in U.S.A., I. **402**; predaceous on Lepidopterous larvae in U.S.A., I. **518,** II. **525,** III. **371.**
Calosoma denticolle, predaceous on *Phlyctaenodes sticticalis* in Russia, I. **359,** II. **504,** III. **221.**
Calosoma externum, predaceous on *Agrotis unicolor* in U.S.A., III. **371.**
Calosoma frigidum, predaceous on *Agrotis unicolor* in U.S.A., III. **371.**
Calosoma inquisitor, predaceous on *Euproctis chrysorrhoea* in France, I. **270**; predaceous on *Otiorrhynchus ligustici* in Russia, II. **669.**
Calosoma investigator, predaceous on *Phlyctaenodes sticticalis* in Russia, III. **221.**
Calosoma luxatum var. *zimmermanni* predaceous on *Malacosoma fragilis* in U.S.A., III. **16.**

Calosoma peregrinator, parasitised by *Biomyia georgiae* in U.S.A., I. 402.
Calosoma schayeri, predaceous on cutworms in Australia, III. 78.
Calosoma scrutator, predaceous on Lepidopterous larvae in U.S.A., I. 226, III. 371, 508.
Calosoma semilaeve, predaceous on *Malacoma fragilis* in U.S.A., III. 16.
Calosoma sycophanta, predaceous on gipsy moths and other insects in Canada and U.S.A., I. 270, 403, 417, 426, II. 136, 295, 343, 394, 422, 710, III. 63, 329, 330, 371, 507, 715; predaceous on vine moths in Russia, III. 211; artificial rearing of, in U.S.A., III. 715–717.
Calosoma willcoxi, predaceous on *Agrotis unicolor* in U.S.A., III. 371.
Calotermes assmuthi, destroying timber in Bombay, I. 525.
Calotermes balloui, on cacao and sugar-cane in the West Indies, II. 284.
Calotermes castaneus, on sugar-cane in Barbados, II. 284.
Calotermes flavicollis, in vineyards in Algeria, II. 596; seldom attacking buildings in France, II. 657; on vines in Italy, III. 113.
Calotermes incisus, on sugar-cane in the West Indies, II. 284.
Calotermes militaris, on tea in Ceylon, I. 88, II. 512.
Calotermes sarasini, on cacao in Samoa, II. 555.
Calotermes venezolanus, on sugar-cane in St. Kitts, II. 284.
Calotropis procera, *Dacus longistylus* on, in Africa, III. 748; *Hemichionaspis proxima* on, in W. Africa, II. 354; *Dacus longistylus* on, in India, III. 27.
Calpodes ethlius (Arrowroot Worm), on arrowroot in British Guiana, II. 497; parasites of, in British Guiana, II. 497, 520; on arrowroot in the West Indies, I. 83, II. 143, III. 411.
calthae, *Aphalara*.
Calymnia (*Cosmia*) *trapezina*, on oaks in England, II. 619; in forests and orchards in Russia, III, 217, 221; Tachinid parasites of, III. 217.
Calymniodes latifascia, on sugar-cane in British Guiana, I. 521.
calypso, *Holcencyrtus*.
cambelli, *Axiagastus*.
Camel Thorn (*Alhagi camelorum*), *Orgyia dubia* on, in Russia, III. 219.
camelicola, *Pulvinaria*.
Camelina dentata, *Phyllotreta nemorum* on, in Russia, I. 211.
Camelina sativa (Siberian Oil-seed), pests of, in Russia, I. 486, 487, II. 468.
Camellia, *Aphis camellicola*, sp. n., on, in Argentina, III. 55; *Pulvinaria floccifera* on, in Australia, III. 503; *Pulvinaria vitis* on, in Britain, III. 754; *Chrysomphalus aonidum* on, in Egypt, II. 605; insect pests imported on, into U.S.A., III. 454, 455, 469, 494, 690, 739.
Camellia japonica, *Fiorinia theae* on, in U.S.A., I. 101.
camelliae, *Aspidiotus* (see *A. rapax*).
camellicola, *Aphis*.
Camelonotus, on palms in America, II. 99.
Camels, *Mylabris frollowi* causing illness amongst, in Central Asia, II. 474.
Camenta, on coffee in E. Africa, II. 570.
Camenta westermanni, on cotton in Africa, II. 1, 2.
Cameroons (see Kamerun).
camerunus, *Pseudodoryctes*; *Xyleborus*.
caminea, *Cerotoma*.
Camnula pellucida, bionomics of, in Canada and U.S.A., II. 491, III. 263, 368, 450, 466, 690.
campestris, *Lygus*; *Scolia*.
Camphor (*Cinnamomum camphora*), pests of, in E. Africa, I. 11, 414, 415, II. 429; pests of, in Ceylon, II. 306, 597; pests of, in Florida, I. 149, 512, III. 306, 326; *Helopeltis bergrothi* on, in Java, III. 662; *Xyleborus camphorae* on, in Mauritius, I. 351; *Duomitus punctifer* on, in W. Indies, III. 73.
Camphor, against *Lepisma saccharina*, III. 714; spirits of, against *Nosema apis*, III. 612.
Camphor Borer (see *Tragocephala pretiosa*).
Camphor Leaf-miner (see *Acrocercops ordinatella*).
camphorae, *Xyleborus*.
Camphorosoma annua, *Phlyctaenodes nudalis* on, in Russia, II. 248.
Camponotus, predaceous on locusts in Malay States, III. 467; destroying *Cydia pomonella* in Russia III. 35; in Sardinia, I. 221.
Camponotus compressus, associated with *Psylla isitis* in India, II. 687; attacking predaceous enemies of scale-insects in India, II. 139.
Camponotus herculeanus vagus, damaging cork trees in Sardinia, I. 506.

Camponotus maculatus turkestanicus, in buildings in Turkestan, II. 73.
Camponotus pennsylvanicus, associated with *Thelia bimaculata* in U.S.A., III. 580.
Campoplex, parasite of *Lophyrus* in Russia, II. 215; parasite of *Ceramica picta* in U.S.A., II. 115; parasite of *Epelis truncataria* var. *jaxonii* in U.S.A., III. 531.
Campoplex nanus, parasite of *Coleophora laricella* in Europe, I. 63.
Campoplex oxyacanthae, parasite of *Bupalus piniarius* in Russia, III. 49.
Campoplex pomorum, parasite of *Cydia pomonella* in Russia, I. 366.
Campoplex sordidus, parasite of *Hyponomeuta malinellus* in Rumania, III. 344.
Campoplex tumidulus, parasite of *Coleophora laricella* in Europe, I. 63.
Campoplex virginalis, parasite of *Coleophora laricella* in Europe, I. 63.
Camposcopus aclerivora, sp. n., parasite of *Acleris* in U.S.A., III. 658.
Campsomeris (*Dielis*) *dorsata*, destroying *Lachnosterna* and *Ligyrus* in the W. Indies, I. 184, 253, II. 49, 532, III. 500.
Camptobrochis brevis, predaceous on *Monellia caryae* in U.S.A., III. 142.
Camptobrochis nebulosus, predaceous on *Eriosoma lanigerum* in Colorado, I. 26; attacking *Phorodon humuli* in U.S.A., I. 242.
Camptobrochis nitens, predaceous on *Eriosoma lanigerum* in Maine, I. 26.
Camptocampus aterrimus, on *Trifolium pratense* in England, I. 242.
Campylomma livida, attacking *Psylla isitis* in India, II. 687.
Campylomma verbasci, on apples and pears in U.S.A., I. 154, II. 135, III. 725; disseminating fire-blight in U.S.A., II. 288, III. 465; distribution of, II. 467.
cana, Chortophila; *Thosea*.
Canada, pests of cereals in, I. 412, II. 382, III. 416, 630; control of insects infesting flour-mills in, III. 175; forest pests in, I. 166, 201, 231, 406, II. 24, 491, III. 2, 19, 43, 327; fruit pests and their control in, I. 403, 406, II. 22, 23, 94, 281, 431, 512, III. 72, 339, 407, 508, 554, 583, 619, 677, 719; control of locusts in, III. 368, 553; potato pests in, III. 469; control of *Aspidiotus perniciosus* in, II. 217; *Euproctis chrysorrhoea* and its control in, I. 402, III. 42; bionomics and control of *Otiorrhynchus ovatus* in, III. 7; cutworms and their control in, II. 23, 24, 381, 487, III. 18, 368, 469, 564, 620, 628, 732; flea-beetles of, I. 298–300, III. 149; miscellaneous insect pests of, I. 140, 400, 401, 402, 403, 404, 406, 430, II. 94, 203, 204, 468, 491, 492, 600, 664, 665, 674–676, 677, III. 18, 42, 69, 70, 71, 72, 269, 507, 551, 552, 553, 565, 584, 620; loss due to insect pests in, III. 69; legislation against insect pests in I. 47, II. 33, 94, 207, 273, III. 9, 32, 71; economic ornithology in, II. 24, 306, III. 57, 249; Applied Entomology in, III. 9; importance of Economic Entomology in, I. 401; Entomological Service of, II. 407; (see also under British Columbia, etc.).
Canada Thistle (see *Cirsium arvense*).
canadense, Eulecanium (*Lecanium*); *Macrosiphum*.
canadensis, Epochra; *Hoplocampa* (*Emphytus*); *Ichneumon*; *Leptura*; *Mamestra* (see *Polia nevadae*); *Pemphigus*; *Polistes*.
canadensisella, Bucculatrix.
canaliculatus, Lyctus (see *L. linearis*); *Valgus*.
Canarium commune, pests of, in Java, I. 355, II. 535, III. 661, 662.
Canarsia hammondi, on apple in Missouri, III. 180.
Canary Islands, II. 316; parasites of *Ceratitis capitata* from, III. 169; *Hemerophila nemorana* in, III. 11; *Lampides baetica* in, I. 411; *Leucaspis perezi*, sp. n., from, III. 345; *Phthorimaea operculella* in, II. 401.
Canary Tree (see *Canarium commune*).
Canavalia ensiformis (Sword Bean), pests of, in Mauritius, I. 28, III. 160; *Corythuca gossypii* on, in Porto Rico, III. 476; not attacked by *Maruca testulalis* in Sumatra, III. 248.
Canavalia indica, Dichocrocis punctiferalis on, in Queensland, II. 20.
cancellatus, Carabus.
cancroides, Chelifer.
candida, Lawana (*Poeciloptera*); *Saperda*.
candidatum, Poecilosoma.
Candytuft, *Exomias pellucidus* on, in England, III. 288.
Cane Sugar, a preservative for Bordeaux mixture, III. 518.
canella, Diatraea.

canescens, Cleonus.
caniculata, Fannia.
caniculus, Prionoryctes.
Canidiella curculionis, parasite of *Hypera variabilis* in Russia, II. **39, 109, 577.**
canifrons, Ascogaster.
canina, Epilachna.
Canker Fungus (see *Nectria ditissima*).
Canker Worm, Fall (see *Alsophila pometaria*).
Canker Worm, Spring (see *Palaeacrita vernata*).
Cannabis (see Hemp).
Cantaloups, *Dacus cucurbitae* on, in Hawaii, III. **29, 163**; *Diaphania* spp. on, in U.S.A., I. **53, 219,** III. **471**; (see Melon).
cantans, Phasgonura (*Locusta*).
Cantharis fusca, attacking Aphids in Russia, III. **606.**
Cantharis nuttalli, on lucerne in Montana, II. **537**; food-plants of, in Saskatchewan, III. **70, 507.**
Cantharis obscura, on apple blossoms in Norway, III. **107**; attacking Aphids in Russia, III. **606.**
Cantharis pilosella, parasitic on bees in Turkestan, II. **714.**
Cantharis stygica, on asters in California, II. **116.**
Cantharis viridana, food-plants of, in British Columbia, III. **507.**
Canthecona furcellata, predaceous on *Laphygma exigua* etc. in India, II. **248,** III. **144.**
canus, Limonius; *Rhynchaenus* (*Orchestes*).
Cape Jasmin (*Gardenia florida*), *Aleurodes citri* on, in Florida, I. **186,** III. **23.**
capensis, Dactylopius confusus; *Pachytylus* (see *Locusta pardalina*); *Trichopria.*
capitata, Ceratitis; *Gonia*; *Piesma.*
capitatus, Strophosomus.
capitella, Incurvaria (*Tinea*).
capitis, Aphelinus.
Capnodis tenebricosa, in Turkestan, II. **714.**
Capnodis tenebrionis, on apricots in Algeria, III. **739.**
Capnodium, associated with *Psylla pyri* in the Crimea, I. **362**; on cotton in Turkestan, II. **312**; earwigs feeding on, II. **547.**
Capnodium salicinum, on hops in Russia, III. **606**; associated with scale-insects and Aphids in Russia, II. **43, 80,** III. **601, 604.**
cappari, Lecanium.
Capparis mitchelli, Lecanium cappari, sp. n., on, in Australia, III. **652.**
capraca, Neoclytis.
caprea, Neoclytus.
capreae, Cavariella (*Rhopalosiphum, Siphocoryne*); *Eulecanium*; *Galeruca* (*Adimonia*).
Caprinia conchylalis, on *Funtumia elastica* in Ceylon, II. **192, 644.**
Capriola dactylon (Bermuda Grass), *Stictocephala* on, in U.S.A., III. **333.**
Capsella bursa-pastoris (Shepherd's Purse), *Chortophila brassicae* on, in France, III. **189**; Aphids on, II. **5, 494,** III. **375, 704**; *Phyllotreta nemorum* on, in Russia, I. **211.**
capsellae, Aphis.
Capsicum, Dacus ferrugineus on, in Java, III. **4, 713**; mosaic disease of tobacco in, I. **19.**
Capsicum annuum (Red Pepper), *Phthorimaea operculella* on, II. **401.**
Capsus lineolatus (see *Adelphocoris*).
Capsus magnicornis, III. **345.**
Capsus mali (see *Atractotomus*).
Capsus pastinacae (see *Lygus*).
Capsus planicornis, III. **345.**
Capsus saltator (see *Orthocephalus*).
Capua angustiorana (see *Batodes*).
Capua coffearia (see *Homona*).
Capua reticulana (see *Adoxophyes*).
capucina, Tortrix (*Archips*).
capucinus, Bostrychus (*Apate*); *Lepyrus.*
capulifera, Pimpla.
Carabus, Broscus cephalotes predaceous on, II. **466**; not destroying *Meloe*, II. **474.**
Carabus auratus, II. **326**; predaceous on *Otiorrhynchus sulcatus* in Russia, II. **360.**
Carabus cancellatus, bionomics of, in Russia, II. **326,** III. **398, 402, 536.**
Carabus granulatus, II. **326**; predaceous on *Euxoa segetum* in Russia, III. **398.**
Carabus hortensis, destroying cutworms in Russia, III. **536.**
Carabus menetriesi, II. **483.**
Carabus nemoralis, predaceous on *Otiorrhynchus picipes* in Ireland, II. **656**; destroying cutworms in Russia, III. **398, 536.**
Carabus scabriusculus, preying on *Amphimallus solstitialis* in Russia, III. **402.**
Carabus violaceus, II. **326.**
Caradrina, on cotton-seed and tomatoes in Turkestan, II. **73.**
Caradrina exigua (see *Laphygma*).
Caradrina quadripunctata (see *Athetis clavipalpis*).
Caradrina reclusa (see *Elydna*).

caradrinae, Chelonus.
Caragana, Acyrthosiphon caraganae on, III. 543.
Caragana arborescens, Aphids on, in Russia, I. 461, III. 702.
caraganae, Acyrthosiphon (*Macrosiphum, Siphonophora*).
Carambola, Ceratitis capitata on, in Hawaii, I. 374.
Caraway (*Carum carui*), *Depressaria apicella* (*nervosa*) on, I. 159, 515, III. 220.
Caraway Moth (see *Depressaria apicella*).
Carbolic Acid, against ants, II. 345, III. 364; against wood-boring beetles, I. 423, 427; ingredient of mixture against cockroaches, I. 62; an ingredient of Nessler liquid against *Eriosoma lanigerum*, II. 77; against termites, I. 465; and lime, formula for, II. 161; and tobacco, against vine moths, I. 231.
Carbolic Emulsion, against *Agromyza phaseoli*, II. 18; against *Chortophila brassicae*, I. 387, 413, II. 161, III. 101, 370; against Coccids, II. 35, 199, 247, 437, III. 84, 204, 689; against *Epicometis hirtella*, II. 374; against *Hoplocampa brevis*, I. 357, II. 330; against *Hylemyia antiqua*, I. 498, II. 381, III. 148, 422; against *Phlyctaenodes sticticalis*, I. 361, 493, II. 481, III. 402; against peachborers, II. 23; formulae for, I. 357, 387, 427, II. 23, 437, III. 689, 700; as an insecticide, III. 139, 284; cost of, II. 381.
Carbolineum, against Aphids, I. 235, 471, II. 77, 501, III. 76, 200; against Coccids, I. 363, 375, II. 199, 298, 500, 572, 650, III. 215, 319; against *Lymantria dispar*, I. 362, II. 274; against mites, II. 642, III. 201, 254, 435; against termites, I. 465, III. 379; against wood-borers, I. 423, 427, II. 176, 428, 535, III. 256; against pests of fruit trees, I. 362, II. 51, 73, 74, 241, 310, 500, III. 106, 199, 250, 353, 644, 743; value and properties of, as an insecticide, I. 261, II. 210, 241, 254, 589; formula for, II. 176.
Carbon Bisulphide, against ants, I. 328, II. 224, 463, 593, 646, III. 412, 664; an ingredient of Muth's emulsion against *Clysia ambiguella*, II. 538, 683; against *Eriosoma lanigerum*, II. 76, 496, 570; against *Galleria mellonella*, I. 454, II. 380, III. 732; against *Gryllotalpa*, II. 51, 595, III. 613; against *Lasioderma*, I. 171, 289, III. 157; against *Melolontha* and *Lachnosterna*, II. 123, 244, 418, 538, 602, 614, 640, III. 228, 601; against *Oryctes rhinoceros*, II. 27, 30, 99, 540; against *Otiorhynchus*, I. 94, II. 183, 360, III. 7; against *Phylloxera*, I. 428, II. 293, 418, 517, 518, III. 405; against *Rhynchophorus ferrugineus*, II. 643; against termites, I. 477, II. 512, 596; against pea and bean weevils, I. 476, II. 97, 160, 498, 501, 693, III. 482, 504, 626, 763; against wood-borers, I. 3, 23, 86, 261, 385, 397, 452, II. 151, 158, 174, 185, 196, 276, 407, 486, 500, 570, 623, 662, 697, III. 165, 198, 256, 301, 587, 649, 673, 751; fumigation with, against grain and flour pests, I. 21, 85, 86, 383, II. 33, 34, 40, 41, 97, 117, 204, 205, 285, 382, 503, III. 166, 176, 381, 402, 409, 451, 465, 488, 692; injections of, against underground pests, I. 3, 23, 86, 191, 207, 220, 308, 387, 407, 536, 538, II. 123, 183, 255, 256, 369, 418, 448, 538, 542, 557, 570, 608, 614, 638, III. 59, 106, 123, 151, 164, 177, 189, 223, 370, 470, 658, 701, 707; ineffective against *Agriotes lineatus*, II. 265; ineffective against *Eriopus floridensis*, II. 92; ineffective against froghoppers, I. 233, II. 61; ineffective against *Pogonomyrmex barbata*, III. 512; ineffective against *Tribolium confusum*, II. 549; ineffective against *Melolontha*, II. 699; fumigation with, I. 377, 530, II. 92, 219, 450, 531, 581, 691, III. 179, 185, 212, 328, 350, 377, 559, 633, 685; apparatus for injectionof, into soil, II. 255; methods of using, I. 441, 496, III. 177.
Carbon Dioxide, fumigation with, against pests of stored maize, III. 166; effect of, on lime-sulphur, I. 456, II. 544.
Carbon Tetrachloride, experiments with, against *Calandra oryzae*, III. 465; trials with, against *Phylloxera*, II. 518; against termites, I. 477; against coffee pests in Uganda, II. 276, III. 751; effect of, on grain pests, III. 692; ineffective against Bostrychid borers, II. 591; ineffective against *Monarthropalpus buxi*, III. 350; for disinfecting cotton seed, II. 581; unsatisfactory as an insecticide, I. 539.
carbonaria, Agromyza; *Oscinis.*

carbonarius, Ephialtes (see *Calliephialtes messor*); *Termes.*
Carcelia (*Parexorista*) *cheloniae*, parasite of *Stilpnotia salicis* in Russia, III. 138.
Carcelia excisa, parasite of *Stilpnotia salicis* in Russia, III. 138.
Carcelia gnava, parasite of *Malacosoma neustria* in Russia, III. 639; parasite of *Stilpnotia salicis* in Russia, III. 138.
carcharias, Saperda.
Cardamine, Phaedon cochleariae on, III. 346.
Cardamom (*Elettaria major*), pests of, in Ceylon, I. 351, III. 724.
cardamomi, Coccotrypes.
Cardinalis cardinalis, destroying *Diabrotica duodecimpunctata* in U.S.A., I. 431.
cardinalis, Dysdercus; *Novius* (*Vedalia*).
Cardiochiles longiceps, in Senegal, II. 346.
Cardiococcus foraminifer, food-plants of, in Australia, III. 652.
Cardiococcus fossilis, food-plants of, in Australia, III. 652.
Cardiophorus aeneus, on sugar-beet in California, II. 303.
Cardiophorus crinitus, on sugar-beet in California, II. 303.
Cardiophorus discicollis, on apple and pear in Astrachan, III. 221.
Cardiophorus fenestratus, in Okanagan, II. 676.
Cardiophorus rufipes, on apples and pears in Astrachan, III. 221.
Cardiophorus tenebrosus, in Okanagan, II. 676.
Cardiophorus tumidicollis, in Okanagan, II. 676.
Cardoon, pests of, in France, I. 339, II. 310; *Hymenia fascialis* on, in U.S.A., I. 292.
carduellinum, Rhopalosiphum.
cardui, Aphis; *Lixus*; *Lysiphlebus*; *Phaenobremia*; *Pyrameis* (*Vanessa*).
carduorum, Apion.
Carduus, Aphids on, in Africa, III. 748, 749; pests on, in Russia, I. 447, II. 212, 425; (see Thistle).
Carduus arvensis, Myzus bragii on, in Colorado, III. 351.
Careless Weed (see *Amaranthus retroflexus*).
Carex, Aphis avenae on, in U.S.A., II. 696.
Careya arborea (Patana Oak), *Heliothrips* on, in Ceylon, III. 157.
Carica papaya (see Papaw).
caricae, Hypsa.
caricinus, Corymbites.
carinatifrons, Hadronotus.
carinatum, Dorcadion.
carinatus, Eriophyes (*Phytoptus*); *Tetrastichus*; *Trochalus.*
Carineta fasciculata, on coffee in Brazil, II. 205.
Carissa arduina, Ceratitis capitata on, in Hawaii, I. 374.
carmodyi, Tomaspis.
carnaria, Sarcophaga.
Carnation (*Dianthus caryophyllus*), pests of, in Australia, III. 470; pests of, in the British Isles, II. 656, III. 14; pests of, in France, I. 124, II. 620; mites on, in U.S.A., I. 241, III. 566; effect of carbon bisulphide on, II. 256; not affected by potassium sulphocarbonate, II. 363.
Carnation Fly (see *Hylemyia nigrescens*).
Carneades scandens (see *Lycophotia*).
carneola, Protaetia.
carnifex, Aphidoletes; *Cosmopepla*; *Scolia.*
Carob (*Ceratonia siliqua*), *Chrysomphalus aurantii* on, in Australia, II. 584; *Mytilaspis ceratoniae* on, in Greece, I. 167; *Eumarschalia gennadii* on, in Italy, III. 55; pests of, in Spain, II. 155, III. 276; pests of, in U.S.A., II. 662, III. 151.
Carolina, *Agromyza scutellata* in, III. 133; control of *Aspidiotus perniciosus* in, III. 618; Buprestidae of, I. 160; parasites of Chrysopids in, III. 25; *Diabrotica duodecimpunctata* in, I. 430; *Fiorinia theae* on camellias in, I. 101; Meloidae of, I. 243; *Phthorimaea operculella* in, I. 102, II. 280; *Pleurotropis testaceipes* in, II. 307; scale-insects of, I. 55; bionomics of *Sphenophorus* spp. in, I. 262; *Tenuipalpus yothersi* in, III. 306; wireworms in, III. 465, 693, 709; pests of cotton in, I. 353, II. 392, 650; (see also U.S.A.).
Carolina gummifera, Dociostaurus maroccanus on, in Sicily, III. 39.
carolina, Arthrocnodax; *Dissosteira*; *Melanophila*; *Stagmomantis*; *Tetracha.*
Carolinaia cyperi, sp. n., on *Cyperus esculentus* in Florida, III. 406.
Caroline Islands, *Graeffea cocophaga* on coconut in, II. 691.
carpatus, Apanteles.
Carpenter Ants, destroyed by birds, III. 559.
Carpenter Worm (see *Prionoxystus robiniae*).
Carpet Beetle (see *Anthrenus scrophulariae* and *Attagenus piceus*).

carpini, Scolytus (*Eccoptogaster*); *Tetranychus.*
Carpocapsa (see *Cydia*).
carpocapsae, Aenoplex; *Ascogaster*; *Bassus*; *Hemiteles*; *Trichogramma* (*Pentarthron*).
Carpocoris fuscispinus, parasites of, in Russia, I. 449, III. 7.
Carpocoris nigricornis, parasites of, in Russia, I. 448, 449.
Carpocoris purpureipennis, bionomics of, on mustard, etc. in Russia, II. 355, 358, III. 6, 220, 439, 638, 727.
Carpodacus mexicanus frontalis (California House Finch), destroying *Macrosiphum rosae* in U.S.A., II. 527.
Carpoglyphus anonymus, in dried fruits, etc. in Britain, II. 564.
Carpomyia pardalina (Melon Fly), bionomics of, on melons in Baluchistan, II. 426.
Carpophilus, parasitised by *Zeteticontus abilis* in French Guinea, III. 433.
Carpophilus binotatus, on cotton in Uganda, II. 592.
Carpophilus dimidiatus, on date palm in Arizona, I. 180; on citrus in the Mediterranean region III. 143.
Carpophilus hemipterus (Dried-fruit Beetle), in dried fruit in California, III. 575, 684, 685; in dried figs, II. 511.
Carpophilus latinasus, imported into U.S.A. on avocado seeds from Guatemala, III. 455.
Carpophilus luridus, on cotton in Uganda, II. 592.
Carpophilus mutillatus, on cotton in Uganda, II. 592.
Carposina chersodes, on olive in Africa, III. 432, 433.
Carrot (*Daucus carota*), *Rhizoglyphus echinopus* on, in Australia, I. 513; pests of, in the British Isles, II. 8, 498; *Systena blanda* on, in Canada and U.S.A., I. 299, III. 457, 629; pests of, in Denmark, III. 247, 699; pests of, in France, I. 227, 334, 335, II. 420; *Psila rosae* on, in Norway, III. 107; *Phytometra orichalcea* on, in Rhodesia, III. 361; pests of, in Russia, I. 463, 499, II. 266, 341, 425, III. 309, 403, 481.
Carrot Fly (see *Psila rosae*).
Carrot Rust Fly (see *Psila rosae*).
Carrot, Wild, *Crambus caliginosellus* on, in Virginia, II. 525.
carsellae, Aphis.
cartereti, Aulacophora.
Carthamus, Laphygma exigua on, in India, II. 248.
Cartodere ruficollis, in wheat in Montana, II. 537.
Carum carui (see Caraway).
Carya (see Hickory).
Carya alba, Hepialus humuli on, in Germany, I. 372; *Tremex columba* on, in U.S.A., II. 697.
Carya olivaeformis (see Pecan).
caryae, Acrobasis; *Grapholitha* (see *Cydia caryana*); *Monellia.*
caryae-avellana, Phylloxera.
caryae-caulis, Phylloxera.
caryae-phallax, Phylloxera.
caryana, Cydia (*Grapholitha*).
caryella, Monellia.
Caryoborus (see *Pachymerus*).
Caryopteris mastacanthus, Aulacaspis pentagona on, I. 222.
Caryota urens, Rhinoceros beetle not infesting, in the Seychelles, II. 568.
casazzae, Albinia (see *Cryptoblabes gnidiella*).
casei, Piophila.
Casein, as an adhesive in sprays, I. 294, 472, 548, II. 25, 556, 588, 681, III. 523.
Caspian Sea, locusts breeding along the shores of, I. 535, 543, II. 53.
Cassava (*Manihot utilissima*), pests of, in Brazil, II. 194; *Tetranychus bimaculatus* on, in Java, III. 632; *Mytilaspis dispar* on, in Madagascar, II. 92, 425; *Zonocerus variegatus* on, in Nigeria, III. 164; pests of, in West Indies, I. 258, II. 104, 144, 532, 533, III. 367, 411, 504, 679.
Cassava Hawk Moth (see *Erinnyis ello*).
Cassava Mite (see *Tetranychus bimaculatus*).
Cashew (see *Anacardium occidentale*).
Cassia (Coffee Weed), *Catopsilia crocale* on, in Ceylon, III. 24; *Dichocrocis punctiferalis* on, in Queensland, II. 20; *Coccus hesperidum* on, in the Seychelles, I. 129, 474; *Gargaphia solani* on, in U.S.A., II. 664, III. 575.
Cassia alata, Hemichionaspis on, in Ceylon, III. 168, 725.
Cassia auriculata, Zeuzera coffeae on, in Ceylon, II. 151.
Cassia fistula, Pseudaonidia tesselata on, in Barbados, II. 533; *Oxyrhachys tarandus* on, in India, II. 242.
Cassia occidentalis, Schistocerca paranensis on, in Trinidad, III. 679.
Cassia siamea, Pierid pest of, in the Philippines, I. 314.

Cassida, on artichokes in France, I. 239.
Cassida ferruginea, in orchards in Astrachan, II. 614.
Cassida gibbipennis, on Leguminous plants in Nyasaland, II. 278.
Cassida nebulosa, rare on beet in Belgium, II. 177; on beet and vines in Russia, I. 486, 487, 489, 539, II. 63, 340, 466, III. 67, 93, 393, 402, 443, 601, 610, 640.
Cassida nobilis, on beet in Russia, I. 486, 539.
Cassida oblonga, rare on beet in Belgium, II. 177.
Cassida sanguinolenta, on chicory, I. 256.
Cassida subferruginea, on maize in Russia, I. 487.
Cassida thoracica, on salsify, II. 270.
Cassida viridis, on artichokes in Brittany, II. 606.
Cassida vittata, bionomics and control of, on beet in Italy, III. 6.
Cassidocida aspidomorphae, sp. n., parasite of *Aspidomorpha miliaris* in Bangalore, II. 288.
Cassidula (see *Cassida*).
Castanea dentata, pests of, in U.S.A., II. 94, III. 248, 417, 653.
Castanea sativa, *Vacuna* spp. on, III. 55.
Castanea vesca (see Chestnut).
castanea, *Aegeria* (*Sesia*); *Diparopsis*.
castaneae, *Croesus*; *Dimorphopteryx*; *Ectoedemia*; *Swammerdamia*; *Vacuna*.
castaneipes, *Melanotus*.
castaneum, *Tetropium*; *Tribolium*.
castaneus, *Calotermes*; *Corymbites*.
Castilloa elastica, pests of, in South America, I. 351; *Eupterote geminata* on, in Ceylon, III. 61; pests of, in German Colonies, I. 247, II. 414; pests of, in Java, II. 535, III. 313; *Howardia biclavis* on, in the West Indies, I. 76.
Castilloa Borer (see *Inesida leprosa*).
Castnia daedalus, on coconut in Br. Guiana, II. 57, 569, III. 591.
Castnia licus (Giant Moth Borer), on sugar-cane in South America, I. 103, 139; on sugar-cane and coconut in British Guiana, I. 521, II. 30, 57, 568, 569, III. 591; legislation against, in British Guiana, III. 175; on sugar-cane in Trinidad, II. 31, 460; legislation against, in the West Indies, III. 555.
Castolus plagiaticollis, imported into Trinidad against *Tomaspis saccharina*, II. 31; predaceous on *Tomaspis postica* in Mexico, I. 184; predaceous on froghoppers in Trinidad, II. 62.
Castor-oil plant (*Ricinus communis*), *Eurytela dryope* on, in East Africa, I. 415; *Chionaspis citri* on, in British Guiana, II. 417; *Bryobia* on, in Egypt, II. 505; pests of, in India and Ceylon, I. 508, II. 139, 487, 513, 654, III. 62, 145; *Dihammus fistulator* on, in Java, II. 535, III. 632; *Hemichionaspis minor* on, in Peru, I. 323; *Prodenia litura* on, in the Philippines, I. 482; *Corythuca gossypii* on, in Porto Rico, III. 476; *Dichocrocis punctiferalis* on, in Queensland, II. 20; *Prodenia litura* on, in Rhodesia, III. 360; *Tenuipalpus* spp. on, in U.S.A., III. 306; *Exophthalmus esuriens* on, in the West Indies, I. 166; *Euproctis producta* on, in Zanzibar, III. 125; effect of hydrocyanic acid gas on, II. 611.
castor, *Mutilla*.
castrensis, *Malacosoma* (*Lasiocampa*).
Casuarina, *Apate* on, in E. Africa, II. 570; not attacked by *Pseudococcus filamentosus* in E. Africa, II. 146; scale-insects on, in Australia, II. 705, III. 80, 548, 653; *Oxyrhachys tarandus* on, in India, II. 242.
Casuarina equisetifolia, *Lecanium frontale* on, in the Seychelles, I. 129, 474,
Casuarina suberosa, *Poliaspis casuarinae* on, in Australia, III. 80.
casuarinae, *Fiorinia*; *Lecanium*; *Poliaspis*.
Cat-bird, feeding on grasshoppers in U.S.A., III. 297.
Catabomba pyrastri (see *Lasiophthicus*).
Catalpa, *Certomia catalpa* on, in U.S.A., III. 515; not attacked by *Lymantria dispar* in U.S.A., III. 669; *Aspidiotus perniciosus* on, II. 390.
catalpa, *Certomia*.
cataphracta, *Papaipema*.
Catasetum splendens, *Acythopeus aterrimus* imported into England on, I. 36.
catenata, *Decatoma*.
catenatus, *Phloeobius*.
Catephia alchymista, trapped with molasses in Russia, III. 639.
catharinensis, *Erethistes*.
Cathartus advena, on dried fruit in California, III. 575; effect of heat on, II. 703.

Cathartus gemellatus (Square-necked Grain Beetle), in stored maize in U.S.A., II. **382**, III. **262**.
Cathartus quadricollis, effect of heat on, II. **703**.
Cathorama, on cotton in Africa, II. **2**.
Catocala, parasitised by *Trichogramma fasciatum* in Russia, II. **335**.
Catocala elocata, parasitised by *Trichogramma semblidis* in Russia, I. **432**.
Catocala nupta, trapped with molasses in Russia, III. **639**.
Catocala sponsa (see *Mormonia*).
Catochrysops cnejus, on Leguminous plants in India, II. **487**.
Catochrysops pandava (see *Euchrysops*).
Catolaccus alter, hyperparasite of *Hypera murina* in Russia, II. **109**.
Catolaccus hunteri, parasite of *Anthonomus grandis* in U.S.A., III. **425**.
Catolaccus incertus, parasite of *Anthonomus grandis* in U.S.A., III. **425**.
Catolaccus townsendi, parasite of *Anthonomus vestitus* in Peru, I. **316**.
Catopsilia crocale, on *Cassia* in Ceylon, III. **24**.
Catorama tabaci, on dried tobacco in Cuba, I. **525**.
catori, *Lecanium*.
Catoxantha bicolor, on cacao in Java, III. **661**.
catoxantha, *Brachartona*.
Cattleya, *Isosoma orchidearum* on, II. **482**.
Cattleya Fly (see *Isosoma orchidearum*).
catullus, *Philisora*.
Caucasia, pests of grain in, II. **171**; pests of sugar-beet in, II. **177**, **465**; pests of vines in, I. **461**, **487**, II. **167**, **364**, **467**; cultivation of silkworms in, II. **199**; miscellaneous insect pests of, I. **446**, **478**, **542**, II. **76**, **262**, **356**, **465**, **466**, **467**, **468**; (see also under Russia).
Caucasian Fir (see *Picea orientalis*).
caudata, *Ceronema*.
caudatum, *Lecanium*.
caudatus, *Biosteres*; *Dacus* (*Bactrocera*).
Cauliflower, control of pests of, in Australia, I. **548**; pests of, in the British Isles, I. **387**, II. **8**; pests of, in Canada and U.S.A., I. **400**, **476**, II. **5**, **160**, III. **85**, **511**, **551**; *Forficula auricularia* on, in Denmark, III. **247**; *Chortophila brassicae* on, in France, III. **1**; *Pieris rapae* on, in Hawaii, III. **363**; *Orchestes fagi* on, in Holland, III. **743**; *Cydia leplastriana* on, in Italy, II. **347**; *Chortophila brassicae* on, in Russia, III. **101**.
Caustic Lime, against insect pests, I. **223**, **361**, II. **345**, **369**, **468**; and kerosene emulsion, formula for, against Aphids, II. **77**; and Paris green, formula for, II. **357**; (see Lime).
Caustic Potash, against Coccids, II. **695**.
Caustic Soda, against insect pests, I. **10**, **423**, **433**, II. **114**, **161**, **242**, **563**, **695**; formulae containing, II. **110**, **204**, **242**; ingredient of resin wash, II. **110**; ingredient of Woburn wash, II. **204**.
cautella, *Ephestia*.
Cavariella capreae, on willows in England, III. **660**.
cavasolae, *Allomphale*.
cavicollis, *Galerucella*.
Cayenne Pepper, *Lasioderma serricorne* living in, I. **170**.
ceanothi, *Samia*.
Ceanothus, pests of, in U.S.A., I. **84**, **340**, **384**.
Ceanothus americanus, *Aulacaspis pentagona* on, I. **221**.
Ceanothus cordulatus, *Malacosoma fragilis* on, in U.S.A., III. **15**.
Ceanothus integerrimus (Sweet Birch) pests of, in California, II. **245**, **663**, III. **420**.
Ceanothus velutinus, *Malacosoma fragilis* on, in U.S.A., III. **15**.
Ceara rubber (see *Manihot glaziovii*).
Cebrio bicolor (Collared Wireworm), in U.S.A., III. **300**.
Cecidomyia, on grain crops in Russia II. **5**; on vines in Russia, III. **477**; preying on Coccidae, III. **134**.
Cecidomyia (*Diplosis*) *acarivora*, III. **648**.
Cecidomyia aurantiaca (see *Sitodiplosis mosellana*).
Cecidomyia avenae (see *Mayetiola*).
Cecidomyia brassicae (see *Perrisia*).
Cecidomyia buxi (see *Monarthropalpus*).
Cecidomyia contractor, on cereals in Russia, II. **648**.
Cecidomyia destructor (see *Mayetiola*.)
Cecidomyia leguminicola (see *Perrisia*).
Cecidomyia loti (see *Contarinia*).
Cecidomyia nigra (see *Contarinia*).
Cecidomyia oenophila (see *Janetiella*).
Cecidomyia (*Itonida*) *opuntiae* (Cactus Midge), on cactus in U.S.A., III. **126**, **475**.
Cecidomyia oxycoccana (see *Perrisia vaccinii*).

Cecidomyia pisi (see *Contarinia*).
Cecidomyia pyri (see *Perrisia*).
Cecidomyia pyricola (see *Clinodiplosis*).
Cecidomyia pyrivora (see *Contarinia*)
Cecidomyia rosae, on roses in Russia, II. 720.
Cecidomyia rosaria (see *Rhabdophaga*).
Cecidomyia saliciperda (see *Rhabdophaga*).
Cecidomyia trifolii (see *Perrisia*).
Cecidomyia tritici (see *Contarinia*).
cecidomyia, Holcaeus.
cecropia. Samia.
Cedar (*Cedrus*), *Aspidiotus cedri*, sp. n., on, in Australia, III. 548; *Chionaspis* on, in California, III. 275; *Lymantria dispar* imported on, into U.S.A. from Japan, III. 454; pests of, in Siberia, II. 221, 222; *Cacoecia argyrospila* on, in U.S.A., I. 225; not attacked by *Aspidiotus perniciosus*, I. 472; not readily attacked by gipsy moth, I. 35, 148, II. 711, III. 669.
Cedar, Incense (see *Libocedrus decurrens*).
Cedar, Siberian (see *Pinus cembra*).
Cedar, White (see *Cedrela brasiliensis*).
Cedestis gysselinella, on pines in Sweden, III. 292.
Cedrela brasiliensis (White Cedar), *Acrocinus accentifer* on, in Brazil, II. 174.
cedri, Aspidiotus (*Targionia*).
Cedrus (see Cedar).
Ceiba bombax (see *Eriodendron anfractuosum*).
celarius, Stigmaeopsis.
Celastrus scandens (Bittersweet), *Enchenopa binotata* on, in U.S.A., III. 572.
Celatoria diabroticae, parasite of *Ceratoma trifurcata*, III. 454; parasite of *Diabrotica* spp. I. 430, 431, II. 272.
celer, Bracon.
Celerio (*Deilephila*) *lineata* (White-lined Morning Sphinx), on cotton in N. Africa, II. 1; on vines in Algeria, II. 608; on vines in Astrachan, III. 221; a beneficial insect in British Columbia, I. 84; on tomato, etc., in U.S.A., III. 179, 570; destroyed by *Guiraca caerulea* in U.S.A., II. 709; on onions in Wisconsin, III. 570.
Celerio lineata var. *livornica*, on cotton in N. Africa, II. 1.
celerio, Hippotion (*Chaerocampa*).
celerator, Colpognathus.
Celery, pests of, in Britain, II. 8, 627, III. 660; *Psila rosae* on, in France, I. 335; pests of, in Italy, III. 124; *Pseudococcus* on, in Porto Rico, III. 476; pests of, in U.S.A., I. 102, II. 115, 160.
Celery Caterpillar (see *Papilio polyxenes*).
Celery Fly (see *Acidia heraclei*).
Celes variabilis, bionomics of, in Russia, I. 542, III. 44, 537, 636.
celeus, Phlegethontius.
Celia troglodytes (see *Spilomena*).
celinde, Discophora.
Cellis' Formula (see De Cillis).
cellulosus, Ctenochiton.
celtidis-mamma, Pachypsylla.
Celtis australis, Aulacaspis pentagona on, I. 221.
Celtis sinensis, Pulvinaria photiniae, sp. n., on, in Japan, III. 127.
cementarius, Pelopaeus.
Cemiostoma (see *Leucoptera*).
Cenocoelius populator, parasite of *Saperda candida* in U.S.A., III. 586.
Centaurea, Trichodes attracted by, in Russia, III. 40.
Centaurea diffusa, Phlyctaenodes sticticalis on, in Russia, I. 360.
Centaurea nigra (Knapweed), *Kakothrips robustus* on, in Britain, III. 279.
centaurus, Archon.
Centeterus major, parasite of *Aegeria hylaeiformis*, in France, II. 622.
centifolia, Rhodites.
Centipedes, destroying noxious insects, I. 246, II. 227, 326.
centranthi, Macrosiphum.
Centranthus rubra, Macrosiphum centranthi on, in Britain, III. 762.
Centropogon, experimentally infested with *Aleurodes vaporariorum*, III. 500.
ceparum, Alsophila; (*Anthomyia, Pegomyia*) (see *Hylemyia antiqua*).
cepetorum (*Pegomyia, Phorbia*) (see *Hylemyia antiqua*).
Cephalobus rigidus, on oats in France, III. 428.
cephalonica, Corcyra.
Cephalonomia, parasite of *Ephestia elutella* in Hawaii, III. 681.
Cephalonomia formiciformis, parasite of Bostrychid beetles, II. 9, 196, III. 10.
Cephalosporium lecanii (Shield Scale Fungus), in British Guiana, II. 416, 569; infesting *Coccus viridis* in Ceylon, III. 755; in France, I. 251; spread of, assisted by *Plagiolepis longipes* in Java, III. 317, 646; in the Seychelles, I. 129, 474, II. 566; in the West Indies, I. 83, 97, 263, II. 88, 143, III. 583; on *Lecanium*, III. 501.

Cephalosporium lefroyi, infesting *Aleurodes vaporariorum*, III. 501.
cephalotes, Atta ; *Broscus* ; *Lethrus* ; *Oecodoma*.
cephalomima, Prays.
cephise, Melanchroia (see *M. corvaria*).
Cephonodes hylas, on coffee in the Far East, II. 490.
Cephus, parasitised by Chalcids in Russia, III. 601.
Cephus occidentalis (Wheat-stem Sawfly), bionomics of, on cereals in Canada, I. 412, III. 70, 630.
Cephus pygmaeus (Wheat Sawfly), on cereals in North Africa, II. 297 ; on cereals in France, I. 227, III. 428 ; on cereals in Germany, II. 500, 642 ; on wheat in Holland, III. 743 ; on cereals in Russia, I. 357, 448, 460, 490, II. 172, 201, III. 41, 47, 52, 183, 205, 236, 402, 480, 600 ; in U.S.A., III. 708.
Cephus tabidus, on cereals in Russia, I. 357, II. 201.
Cepophagus echinopus, on hyacinths in France, II. 594.
Ceralces ferrugineus, on rubber in East Africa, I. 414, II. 415.
Cerambycobius peruvianus, parasite of *Anthonomus vestitus* in Peru, I. 316.
Cerambycobius townsendi, parasite of *Anthonomus vestitus* in Peru, I. 316.
Cerambyx, on oak in the Crimea, III. 544.
Ceramica (*Mamestra*) *picta* (Zebra Caterpillar), bionomics of, on vegetables and lucerne in Canada and U.S.A., I. 284, 400, II. 115, III. 570.
ceramicus, Duomitus.
Ceraphron albipes, parasite of *Dasychira pudibunda* in Holland, III. 196.
Ceraphron beneficiens (see *Phanurus*)
Ceranisus, I. 549.
Ceraptocerus ceylonensis, parasite of *Coccus viridis* in Ceylon, III. 647.
cerasana, Tortrix (*Pandemis*).
cerasi, Aphis ; *Eriocampoides* (*Caliroa*) (see *E. limacina*) ; *Eulecanium* (*Lecanium*) ; *Macrosiphum* ; *Myzus* ; *Rhagoletis* ; *Selandria* (see *Eriocampoides limacina*).
cerasifoliae, Aphis.
cerasina, Aphis.
cerasivorana, Cacoecia.
cerasorum, Eulecanium.
Cerataphis insularis, in Java, I. 139.
Cerataphis lataniae, on coconut in British Guiana, II. 569 ; intercepted on palms in California, III. 494, 548, 558, 626, 690 ; on vanilla in Réunion, II. 216.
Ceratina viridissima, food-plants of, in Java, III. 713.
ceratina, Stictaspis.
Ceratitis, on kola seeds in the Gold Coast, II. 141.
Ceratitis anonae, on cacao, in E. Africa, I. 247, 415, II. 283, III. 663 ; parasites of, in W. Africa, II. 317 ; on *Spondias lutea* in Nigeria, I. 97.
Ceratitis bremii, from Senegal, I. 91.
Ceratitis capitata, (Mediterranean Fruit Fly), bionomics of, on coffee, etc. in Tropical Africa, I. 49, 247, II. 59, 316, 317, 447, 570, 591, III. 751 ; control of, in S. Africa, I. 473, III. 36, 502 ; on fruit in Australia, III. 492 ; legislation against, in Australia and New Zealand, III. 582 ; on fruit in Brazil, III. 387 ; imported into Britain from Spain, II. 238 ; declared a pest in British Columbia, I. 48 ; intercepted in California, II. 115 ; bionomics and control of, in Hawaii, I. 38, 374, 510, 517, II. 316, 578, 598, III. 29, 163, 169, 170, 289, 332, 357, 374, 412, 493, 567 ; parasites of, introduced into Italy against, II. 86 ; danger of introduction of, into Java, III. 3 ; on peaches in Madagascar, III. 276 ; in Mauritius, II. 612, III. 731 ; bionomics of, on citrus in the Mediterranean region, I. 43, III. 143, 431, 739, 744 ; danger of introduction of, into U.S.A. and legislation against I. 151, 426, II. 598, 707, III. 657 ; on citrus in the West Indies, II. 88, III. 171 ; on prickly pear, III. 126 ; distribution of, I. 164 ; experiments with substances attractive to, III. 28 ; food-plants of, III. 3.
Ceratitis colae, on kola in the Gold Coast, II. 672, III. 528.
Ceratitis giffardi, sp. n., bionomics and parasites of, in W. Africa, I. 91, 97, 388, II. 317, III. 433.
Ceratitis hispanica, on oranges in Algiers, II. 228.
Ceratitis inscripta, in Ashanti, I. 91.
Ceratitis morstatti, sp. n., on kola nuts in Kamerun, I. 91.
Ceratitis nigra, on cacao in Nigeria, III. 165.

Ceratitis punctata (Cacao Fruit Fly), in French Guinea, I. **91**; on cacao in Uganda, I. **49**, II. **59**, **591**, III. **663**, **752**.
Ceratitis silvestrii, sp. n., on *Chrysobalanus* in Senegal, I. **91**.
Ceratitis stictica, distribution of, I. **91**, **97**; parasitised by *Tetrastichus giffardi* in Nigeria, I. **388**.
Ceratitis stictica var. *antistictica*, n., in Nigeria, I. **97**.
Ceratitis tritea, in Nigeria, I. **97**.
Ceratocolus alatus, preying on *Phlyctaenodes sticticalis* in Russia, II. **63**.
Ceratomia catalpa, on *Catalpa* in U.S.A., III. **515**.
Ceratoneura pretiosa, from galls on Mimosa in Texas, III. **151**.
Ceratonia siliqua (see Carob).
ceratoniae, *Aspidiotus* (see *A. hederae*); *Lepidosaphes* (*Mytilaspis*).
Ceratophorus tenax (see *Pemphredon*).
Ceratostoma piliferum, infesting spruce in Sweden, III. **768**.
Cerceris, preying on *Conorrhynchus mendicus* in Russia, II. **90**.
Cerceris arenaria, preying on *Otiorrhynchus sulcatus* in Russia, II. **360**.
Cerceris quadrifasciata, preying on *Strophosomus capitatus* in Russia, III. **701**.
Cerchysius, parasite of *Microterys flavus* in California, I. **310**.
Cercis canadensis, *Sphenostethus taslei* on, in U.S.A., III. **580**.
Cercocephala atroviolacea, sp. n., in New Mexico, II. **288**.
Cercopeus artemiseae, on apples in British Columbia, I. **90**.
Cercopis, in Holland, III. **643**.
cereale, *Macrosiphum* (see *M. granarium*).
cerealella, *Sitotroga*.
cerealis, *Aphis* (see *Macrosiphum granarium*); *Prolasioptera* (*Lasioptera*); *Siphonophora* (see *Macrosiphum granarium*).
cerealium, *Limothrips* (*Thrips*).
Cereals, pests of, in North Africa, II. **231**, **232**, **233**, **283**, **297**, III. **387**; pests of, in Austria-Hungary, II. **309**, **482**; pests of, in Belgium, II. **176**, **177**; *Oscinella frit* on, in Britain, II. **639**; pests of, in Canada, I. **412**, III. **70**; pests of, in Denmark, III. **245**; pests of in Finland, III. **208**; pests of, in France, I. **226**; pests of, in Germany, II. **642**; pests of, in India, I. **169**; pests of, in New Zealand, III. **721**; pests of, in Norway, III. **107**; pests of, in Russia, II. **342**, **349**, III. **94**; pests of, in U.S.A., II. **114**, III. **262**; (see also Wheat, etc.).
Cereals, Stored, pests of, and their control, I. **21**, **85**, **114**, **118**, **152**, **275**, **293**, **340**, **344**, **382**, **414**, **539**, II. **33**, **40**, **41**, **93**, **97**, **117**, **142**, **204**, **265**, **285**, **382**, **490**, **492**, **503**, **515**, **537**, **549**, **564**, **573**, **703**, III. **44**, **46**, **92**, **129**, **145**, **166**, **175**, **212**, **219**, **221**, **262**, **298**, **345**, **375**, **381**, **399**, **402**, **409**, **451**, **465**, **487**, **566**, **601**, **692**, **694**, **708**, **733**.
cereanus, *Eupelmus*.
cereris, *Chlorops*.
Ceresa basalis, on apple and pear in Oregon, III. **272**.
Ceresa bubalus (Buffalo Tree-hopper), bionomics of, in Canada and U.S.A., I. **136**, **280**, **404**, II. **673**, III. **68**, **180**, **272**, **552**; declared a pest in British Columbia, I. **48**.
ceriferus, *Ceroplastes*.
Cermatulus nasalis, predaceous on *Venusia verriculata* in New Zealand, III. **722**.
Cerococcus hibisci, on *Tephrosia candida* in Ceylon, III. **83**.
Ceroctis trifurca, on beans in Nyasaland, II. **277**.
Cerodontha, revision of species of, I. **506**.
Ceromasia interrupta, parasite of *Pyrausta nubilalis* in Hungary, I. **410**.
Ceromasia sphenophori, introduction of, into Fiji, III. **88**; parasite of *Rhabdocnemis obscurus* in Hawaii, III. **88**, **758**; history of introduction of, into Hawaii, III. **133**.
Ceronema africana, on pigeon peas, etc. in Nigeria, III. **166**.
Ceronema banksiae, on *Banksia serrata* in Australia, III. **503**.
Ceronema caudata, on *Eucalyptus robusta* in Australia, III. **503**.
Ceronema dryandrae, food-plants of, in Australia, III. **503**.
Ceronema koebeli, natural enemies of, in Ceylon, III. **168**.
ceroplastae, *Aneristus*.
Ceroplastes, on coffee in E. Africa, II. **570**; destroyed by *Blastobasis lecaniella* in Br. Guiana, I. **343**; on mimosa in Peru, III. **135**; parasitised by *Coccidoxenus portoricensis* in Porto Rico, II. **288**; intercepted in U.S.A. on mango from Java, II. **460**.
Ceroplastes ceriferus (Indian Wax Scale), III. **135**; food-plants of, in Australia, III. **503**; on tea and coffee in Uganda and E. Africa, I. **49**, **107**, **415**, II. **59**, **447**, **591**, III. **752**; intercepted on camellia etc. in U.S.A., III. **420**, **626**.

Ceroplastes erithraeus, sp. n., on acacia in Eritrea, II. 346.
Ceroplastes ficus, on *Ficus elastica* in E. Africa, II. 414.
Ceroplastes floridensis (Florida Wax Scale), on citrus in Br. Guiana, II. 417; intercepted on camellia, etc. in U.S.A., III. 420, 626.
Ceroplastes galeatus, on coffee in Uganda, I. 49, II. 591.
Ceroplastes quadrilineatus, on *Ficus elastica* in E. Africa, II. 414.
Ceroplastes rubens, food-plants of, in Australia, III. 503; intercepted in California, III. 558.
Ceroplastes rusci (Fig Scale), on figs in France, II. 421; in Spain, III. 276; bionomics and distribution of, III. 11; imported into U.S.A. on *Laurus nobilis*, II. 186.
Ceroplastes sinensis, on tangerines in France, II. 455.
Ceroplastes ugandae, on *Anona muricata* in Uganda, I. 258.
Ceroplastes vinsoni, food-plants of, in Réunion, II. 216.
Ceroplastes vinsonioides, on coffee in Uganda, I. 49, II. 591.
ceroplastis, *Tomocera*.
Ceroplastodes melaleucae, on *Melaleuca nodosa* in Australia, III. 652.
Ceroplesis adspersa, on coffee in E. Africa, I. 414.
Ceroplesis conradti, on coffee in E. Africa, I. 414.
Ceroputo yuccae, food-plants of, in California, II. 436.
Cerostoma persicellum, in the Crimea III. 613.
Cerotoma caminea, a possible pest in U.S.A., III. 406.
Cerotoma denticornis, on beans etc. in Porto Rico, III. 476.
Cerotoma trifurcata, in Porto Rico, I. 389; bionomics of, on beans etc. in U.S.A., III. 453, 709.
cerris, *Arnoldia*.
cervina, *Thosea*.
cervinata, *Porina*.
cervinus, *Dascillus*.
cervus, *Lucanus*.
cespitum, *Masicera*.
Cestrum, *Ceratitis capitata* on, in Hawaii, I. 374.
Cetonia, caught in traps for vine moths in Italy, II. 680.
Cetonia aurata, on fruit etc. in Russia, II. 110, 720, III. 222; *Coccobacillus* infections in, I. 336.
Cetonia stictica (see *Oxythyrea funesta*).
Ceuthorrhynchus, control of, in Russia, III. 701.
Ceuthorrhynchus assimilis, in Denmark, III. 247; on radishes in France, I. 257; on cabbage in Holland, I. 385; on rape in Russia, I. 395.
Ceuthorrhynchus boraginis, on radishes in France, I. 257.
Ceuthorrhynchus macula-alba, on poppies in Russia, III. 481, 640.
Ceuthorrhynchus pleurostigma, on radishes in France, I. 257; on turnips in Ireland, II. 8.
Ceuthorrhynchus quadridens, in Denmark, III. 247, 698.
Ceuthorrhynchus rapae, on radishes in U.S.A., III. 687.
Ceuthorrhynchus sulcicollis, in Denmark, III. 247; on turnips in France, I. 504; on cabbage in Italy, III. 124; on rape and cabbage in Russia, I. 395, II. 497, III. 390, 393.
Ceutophilus, imported into New Jersey from England, III. 469.
Ceylon, cacao pests in, I. 350, III. 300, 662; camphor pests in, II. 597; citrus pests in, II. 306, 644, 651, 652, III. 157; coconut pests in, II. 99, 268, 540, 558, 690, III. 62, 754; coffee pests in, I. 351, II. 150, 151, 323, III. 146; forest pests in, III. 154; rubber pests in, I. 88, II. 26, 191, 192, 414, 643; pests of prickly pear in, III. 126; tea pests in, I. 87, 88, 351, II. 150, 151, 152, 305, 306, 323, 513, 597, 643–644, 654, 671, III. 61, 123, 157, 300, 666, 755; termites in, I. 89, 340, II. 512, 513; thrips from, II. 193, 597, III. 357; new Coccidae from, III. 168, 755; *Coccus viridis* infested with *Cephalosporium lecanii* in, III. 755; *Diadiplosis coccidivora*, sp. n., from, II. 271; *Metarrhizium anisopliae* imported into, against *Oryctes rhinoceros*, III. 754; legislation against *Xyleborus fornicatus* in, III. 65; Hymenopterous parasites from, I. 275, 309, II. 307, III. 443, 647, 724, 725; miscellaneous insect pests of, I. 87, 157, 351, II. 150, 151, 152, 191, 540, 541, III. 24, 61, 74, 80, 83, 157; pests imported into, from other countries, II. 142, 461, III. 289.
ceylonensis, *Ceraptocerus*.
Ceylonica theaecola, food-plants of, in Ceylon, II. 644; on tea in India, III. 489.
ceylonica, *Dentifibula*; *Didactylomia*.
ceylonicus, *Coptotermes*.
Chaerocampa celerio (see *Hippotion*).
Chaerocampa elpenor (see *Pergesa*).

chaerophylli, Aphis.
Chaerophyllum silvestre, Aphis capsellae on, in Russia, III. **704.**
Chaerophyllum temulentum, Aphis capsellae on, in Russia, III. **704.**
Chaerophyllum tuberosum, Aphis chaerophylli on, in Britain, III. **762.**
Chaetellipsis paradoxa, on *Bambusa birmanica* in India, III. **723.**
Chaetocnema amazona, on sweet potatoes in Barbados, II. **533.**
Chaectocnema apricaria, on tomatoes etc. in Porto Rico, III. **477.**
Chaetocnema aridella (see *C. hortensis*).
Chaetocnema aridula, on grain crops in Russia, II. **172, 718,** III. **398, 481, 543.**
Chaetocnema breviuscula, on cereals and beet in Russia, II. **716,** III. **601.**
Chaetocnema concinna, a casual pest of hops, I. **342**; on beets etc. in Russia, II. **34,** III. **222, 606.**
Chaetocnema ectypa, on Sudan grass in U.S.A., III. **512.**
Chaetocnema hortensis, on barley in Russia, III. **543.**
Chaetocnema tibialis, on beet in France, II. **89, 451.**
Chaetodacus bipustulatus (see *Dacus*).
Chaetogaedia monticola, parasite of cutworms in Hawaii, II. **629**; experiments with eggs of, III. **711**; in bait-traps for *Ceratitis capitata*, III. **568.**
Chaetopsis aenea, on onions in Wisconsin, III. **570.**
Chaetosticha nanum (see *Trichogramma*).
Chaff Scale (see *Parlatoria pergandii*).
Chaffinch, an injurious bird, I. **305.**
Chaitophorus, on *Quercus lobata*, in California, II. **251**; on poplar in Saskatchewan, III. **70.**
Chaitophorus betulae, on birch in England, III. **633.**
Chaitophorus delicatus, on willows in Maine, I. **467.**
Chaitophorus maculatus (see *Aphis ononidis*).
Chaitophorus montemartinii, on *Lamium purpureum* in Italy, III. **54.**
Chaitophorus nassonowi, on poplar in Russia, III. **45.**
Chaitophorus populi, on poplar in Russia, III. **224**; distribution and food-plants of, III. **749.**
Chaitophorus populicola, on willows in Maine, I. **467.**
Chaitophorus tridentatae, on *Artemisia* in Oregon, III. **588.**
Chaitophorus viminalis, on willows in Maine, I. **467.**
Chalcis, parasite of *Cassida vittata* in Italy, III. **6**; parasite of *Alabama argillacea* in W. Indies, II. **88, 144.**
Chalcis coloradensis, parasite of *Sarcophaga* in U.S.A., III. **82.**
Chalcis diminuta, parasite of *Sparganothis pilleriana* in France, I. **315.**
Chalcis femorata, parasite of Tachinids in Russia, III. **402.**
Chalcis flavipes, parasite of *Pieris daplidice*, in Russia, I. **537,** II. **356,** III. **637.**
Chalcis obscurata, history of introduction of, into Hawaii, III. **757**; parasite of Lepidoptera in Hawaii, III. **363, 681**; in bait-traps for *Ceratitis capitata*, III. **568.**
Chalcis olethrius, sp. n., parasite of *Pyroderces simplex* in Nigeria, III. **164, 168.**
Chalcis ovata, parasite of *Megalopyge krugii* in Porto Rico, III. **517**; parasite of *Colias eurytheme* in U.S.A., III. **153**; parasite of *Alabama argillacea* in W. Indies, II. **144.**
Chalcis pandora, parasite of Hesperid on sugar-cane in Br. Guiana, II. **520.**
Chalcis polynesialis, parasite of Lepidoptera in Hawaii, III. **681.**
Chalcitelloides nigrithorax, sp. n., from North Queensland, III. **358.**
chalcites, Phytometra (*Plusia*).
chalcographus, Pityogenes (*Ips, Tomicus*).
Chalcophora angulicollis montana, in South Dakota, I. **51.**
Chalcophora georgiana, on pines in North Carolina, I. **160.**
Chalcophora oregonensis, in South Dakota, I. **51.**
Chalcophora virginiensis (Heartwood Pine Borer), in pines in Carolina, I. **160**; in South Dakota, I. **51.**
Chalepus dorsalis, on black locust trees in U.S.A., II. **120,** III. **709.**
Chalicodoma rufescens, parasitised by *Trichodes octopunctatus* in Italy, III. **40.**
Chalioides junodi (Wattle Bagworm), bionomics of, in S. Africa, I. **146, 303,** II. **84,** III. **502.**
chalybaeus, Orcus.
chalybea, Haltica; *Lonchaea.*
chalybeipennis, Oxycephala.
Chamaerops excelsa, Aulacaspis pentagona on, I. **221.**
Chamaerops humilis, Colobopyga magnani on, in Argentina, I. **162.**
champlani, Agrilus.
Changa (see *Scapteriscus didactylus*).

Channel Islands, *Porcellio laevis* on strawberries in, II. 598.
Characoma stictigrapta, on cacao and kola in W. Africa, II. 107, 141, 671, III. 165, 663.
Charadrius fulvus, destroying locusts in the Philippines, I. 68.
Charaxes, parasitised by *Pleurotropis neavei* in Nyasaland, III. 443.
Chareas graminis (see *Tholera popularis*).
Charidryas gorgone, on *Helianthus argophyllus* in Colorado, III. 753.
Charlock (*Brassica sinapis*), *Contarinia nasturtii* on, III. 500.
charis, *Basiothia*.
chartifex, *Azteca*.
Chauliognathus marginatus, destroying *Diatraea saccharalis* in Louisiana, III. 384; destroying *Chloridea obsoleta* in U.S.A., III. 471.
Cheese, *Piophila casei* in, II. 572; *Tyroglyphus* spp. in, II. 41, 503.
Cheese Mite (see *Tyroglyphus siro*).
Cheese Skipper (see *Piophila casei*).
Cheiloneurus sp. n., hyperparasite of *Coccus hesperidum* in California, I. 309.
Cheimatobia boreata, in England, II. 378.
Cheimatobia brumata (Winter Moth), I. 466; in Austria, II. 482; on fruit and forest trees in Britain, I. 463, II. 8, 378, 619, 620, 656, III. 80, 676, 715; in orchards in France, I. 227, II. 420, 501; in orchards in Germany, I. 224, II. 499; regulations for banding trees against, in Germany, II. 684; in orchards in Holland, I. 385, 386, II. 642, III. 742; on gooseberry in Norway, III. 108; bionomics and control of, in Russia, I. 371, II. 428, III. 20, 27, 225, 310, 393, 397, 437, 438, 482, 599, 601, 603, 604, 610; in orchards in Switzerland, I. 22, II. 605, 632, III. 740.
Chelifer alaus, destroying wireworms in U.S.A., III. 300.
Chelifer cancroides, predaceous on *Troctes divinatoria*, I. 530.
Chelinidea, on cactus in U.S.A., III. 126.
Chelinidea tabulata, on cactus in U.S.A., I. 80.
Chelinidea vittigera, on cactus in U.S.A., I. 80.
Chelonella sulcata, parasite of *Gelechia gossypiella* in Egypt, II. 596.
Chelonia caja (see *Arctia*).
cheloniae, *Carcelia* (*Exorista*, *Parexorista*).
Chelonus blackburni, parasite of Lepidoptera in Hawaii, I. 92, II. 280, 629, III. 682.
Chelonus caradrinae, parasite of *Laphygma* (*Caradrina*) *exigua* in Turkestan, II. 515.
Chelonus elaeaphilus, I. 16.
Chelonus insularis, parasite of *Laphygma frugiperda* in Porto Rico, II. 49, III. 477.
Chelonus nigrinus, parasite of *Eucosma ocellana* in Europe, III. 584.
Chelonus orientalis, I. 16.
Chelonus shoshoneanorum, parasite of *Phthorimaea operculella* in California, II. 117.
Chelonus similis, parasite of *Eucosma ocellana* in Europe, III. 584.
Chelonus texanus, parasite of cutworms in U.S.A., I. 16, 547; mode of parasitism of, II. 599, III. 237.
chenopodii, *Aphis*; *Calocoris*.
Chenopodium, pests of, in France, II. 17, 90; pests of, in Russia, I. 486, 489, 494, II. 178, 425, III. 608, 640; *Phlyctaenodes sticticalis* on, in U.S.A., I. 40; Aphids on, I. 77, 78, II. 17, 236, III. 351; removal of, to control *Pegomyia hyoscyami*, III. 608.
Chenopodium album (Lamb's Quarters), *Bothynoderes punctiventris* on, in Russia, II. 64; pests found on, in U.S.A., I. 40, 352, 400, III. 132, 578; *Aphis rumicis* (*atriplicis*) on, I. 77, II. 251, 494.
Chenopodium hybridum, *Aphis rumicis* on, I. 77.
Chenopodium murale, *Aphis rumicis* on, I. 77, II. 251.
Chenopodium polyspermum, *Aphis rumicis* on, I. 77.
Chenopodium quinosa, *Aphis rumicis* on, I. 77.
Chenopodium sinuatum, *Thanatophilus* on, in Russia, III. 542.
Chenopodium urbicum, *Aphis rumicis* on, I. 77.
Chenopodium vulvaria, *Aphis rumicis* on, I. 77.
cherenensis, *Exochomus*.
Cherimoya (*Anona*), *Anastrepha peruviana* on, in Peru, I. 516.
Chermes, on Conifers etc. in Britain, I. 387, II. 497, III. 9, 715; on *Populus balsamifera* in Colorado, II. 634; intercepted in Hawaii, on cherries from Japan, III. 657; on Conifers in Russia, II. 516, III. 41; on Conifers in Switzerland, III. 343; monograph of, III. 592–599.
Chermes abieticolens, identical with *C. pinifoliae*, I. 24.

Chermes abietis (Spruce Gall Louse), and larch canker in Britain, III. 277; on Conifers in Canada and U.S.A., I. 406, II. 492, III. 43, 515, 585; bionomics and control of, in Russia, II. 514, III. 594, 595, 598, 609.
Chermes abietis-laricis, on forest trees in Britain, I. 464.
Chermes abietis-piceae, in India, III. 598.
Chermes coccineus (see *C. pectinatae*).
Chermes coloradensis, not a distinct species, III. 598.
Chermes consolidatus, not a distinct species, III. 598.
Chermes cooleyi, bionomics of, on Conifers in U.S.A., III. 350, 351, 558, 598.
Chermes cooleyi var. *coweni*, migration of, in Colorado, III. 350, 351.
Chermes corticalis (see *C. strobi*).
Chermes floccus, III. 598.
Chermes funitectus, on *Tsuga canadensis* in Germany, III. 597; bionomics of, on silver fir in Russia, II. 13, III. 344, 598.
Chermes hamadryas (see *C. strobilobius*).
Chermes himalayensis (see *C. abietis-piceae*).
Chermes lapponicus, bionomics of, III. 594–598.
Chermes lapponicus var. *praecox*, III. 595, 598.
Chermes lapponicus var. *tardus*, III. 595, 596, 598.
Chermes lariciatus, in U.S.A., III. 598.
Chermes laricis (see *C. strobilobius*).
Chermes montanus, not a distinct species, III. 598.
Chermes nusslini (see *C. funitectus*).
Chermes orientalis (see *C. pini*).
Chermes (*Dreyfusia*) *pectinatae*, bionomics of, on Conifers in Switzerland and Russia, III. 223, 344, 596, 598.
Chermes piceae, on forest trees in Britain, I. 464; in Germany, II. 501; on firs in Norway, III. 696; bionomics and distribution of, on *Abies pectinata*, II. 13, III. 597.
Chermes piceae var. *bouvieri*, on *Abies nobilis* in France, III. 597.
Chermes pini, on forest trees in Britain, I. 464; on pines in Holland, I. 386; on Conifers in Norway, III. 696; bionomics of, II. 14.
Chermes pini var. *orientalis*, bionomics of, III. 597.
Chermes pini var. *pinicola*, bionomics of, III. 597.
Chermes pinicorticis, on Conifers in Canada, I. 406, III. 43, 585; probably not a distinct species, III. 598.
Chermes pinifoliae, identical with *C. abieticolens*, I. 24; not a distinct species, III. 598.
Chermes piniodes, on firs, III. 598.
Chermes populi, on *Populus balsamifera* in Colorado, II. 634.
Chermes sibiricus, on *Pinus cembra* in Holland, III. 201; in Switzerland, III. 343; bionomics of, III. 201, 597.
Chermes similis (Spruce Gall Louse), on Conifers in Canada, I. 91, 406, II. 492, III. 3, 585, 678; probably not a distinct species, III. 598.
Chermes strobi (*corticalis*), on forest trees in Britain, I. 464; bionomics of, in Europe, II. 14, III. 598.
Chermes (*Adelges*) *strobilobius* (*laricis*) (Woolly Larch Louse), on larches in Britain, I. 120, 464, III. 190; on larches in Canada, I. 407, III. 585; in Italy, III. 124; bionomics of, on larches in Russia, III. 43, 105, 594–598, 606.
Chermes strobilobius var. *tradoides*, bionomics of, III. 595, 598.
Chermes viridanus, bionomics of, on larches in Russia, II. 514, III. 596, 598.
Chermes viridis, bionomics of, on firs and larches in Switzerland and Russia, III. 343, 592–598, 606.
Chermes viridis var. *lutescens*, III. 593.
Chermes viridis var. *viridescens*, III. 593.
Chermes viridulus, bionomics of, on larches, III. 344, 596, 598.
chermivora, Agromyza.
Cherry (*Prunus cerasus*), pests of, in Australia, II. 18, III. 80, 158, 492, 527; pests of, in Austria, II. 640; *Porthesia auriflua* on, in Britain, I. 433, III. 100, 676; *Parlatoria theae* intercepted on, in California, III. 626; pests of, in Canada, I. 87, 401, 404, 405, 406, 413, II. 217, 431, 432, 665, 675, 677, III. 72, 293, 358, 408, 551, 559; *Rhagoletis cerasi* imported into England on, II. 55; pests of, in France, II. 195, 402, 421, 478, III. 11; pests of, in Germany, II. 485, 500; pests intercepted on, in Hawaii, from Japan, III. 657; *Cheimatobia brumata* on, in Holland, I. 386, III. 741–743; pests of, in Italy, III. 124; pests of, in Japan,

III. 546; culture and pests of, in New Zealand, II. 576; *Argyresthia ephippiella* on, in Norway, III. 108; *Vanessa polychloros* on, in Portugal and Barbary, I. 313, III. 427; resistant to *Eriosoma lanigerum* in S. Rhodesia, II. 163; pests of, in Russia, I. 208, 368, 437, 438, 439, 488, 490, 497, 536, II. 35, 36, 44, 51, 80, 337, 368, 369, 370, 419, 636, 692, 700, 718, III. 20, 43, 47, 49, 67, 105, 106, 172, 204, 221, 223, 225, 240, 310, 401, 438, 442, 533–535, 601, 604, 605, 610, 639; pests of, in U.S.A. I. 40, 64, 100, 131, 134, 153, 154, 178, 281, 381, 418, 425, II. 14, 113, 117, 120, 244, 247, 287, 390, 439, 458, 485, 529, 599, 601, 674, 707, 710, III. 52, 77, 85, 140, 180, 192, 257, 258, 260, 268, 270, 272, 352, 414, 415, 423, 462, 493, 515, 625, 654, 668, 671, 691.

Cherry, Barbados (see *Malpighia glabra*).

Cherry, Bird (see *Prunus avium*).

Cherry, Choke (see *Prunus virginiana*).

Cherry, Flowering, *Aulacaspis pentagona* on, in Massachusetts, II. 184.

Cherry, Sour, *Aspidiotus perniciosus* on, in Canada, II. 217; pests of, in U.S.A., II. 244, 380.

Cherry, Weeping, *Aulacaspis pentagona* imported into U.S.A. on, from Japan, II. 184.

Cherry, Wild, pests of, in Canada and U.S.A., I. 176, 203, 225, 231, 401, II. 25, 120, 132, 307, 704, III. 414, 473, 508; elimination of, against brown-tail moth, II. 295.

Cherry, Wild Black (see *Prunus serotina*).

Cherry Aphis (see *Myzus cerasi*).

Cherry Fruit Flies (see *Rhagoletis cerasi*, *R. cingulata* and *R. fausta*).

Cherry Laurel, *Aleurodes citri* on, in Florida, III. 23.

Cherry Sawfly (see *Hoplocampa cookei*).

Cherry Sawfly Leaf-miner (see *Profenusa collaris*).

Cherry Scale (see *Aspidiotus forbesi*).

Cherry Slug (see *Eriocampoides limacina*).

chersodes, Carposina.

Chestnut, pests of, in France, II. 195, 196, 402, III. 10; not attacked by *Aspidiotus perniciosus* in France, I. 472; new Aphids on, in Italy, III. 55; pests of, in Russia, I. 368; pests of, in Portugal, I. 313, 314; pests of, in Spain, III. 276; pests of, in U.S.A., I. 29, 280, 427, 546, II. 29, 35, 132, 193, 390, III. 162, 249, 415, 558, 579, 580, 658, 668, 671; insect pests intercepted on, in U.S.A., III. 289, 420; *Cydia amplana* on, II. 419; resistant to gipsy and brown-tail moths, I. 35, II. 294, 711; saponin extracted from, II. 556.

Chestnut Bast-miner (see *Ectoedemia phloeophaga*).

Chestnut Blight (see *Eudothia parasitica*).

Chestnut Weevil (see *Balaninus*).

chevrieranus, Odynerus.

Cheyletus, in hay and clover seed in Russia, II. 41.

Cheyletus eruditus, predaceous on *Tyroglyphus farinae* in Russia, III. 212.

chi, Antitype (*Polia*).

Chickweed, *Psylliodes punctulata* on, in British Columbia, I. 87.

Chicory, pests of, I. 256, III. 102, 536.

Chile, Argentine ant in, I. 325; *Bruchophagus funebris* in, III. 185; Coccidae of, I. 138, III. 302; new Hymenopterous parasites from, I. 350; *Rhigopsidius tucumanus* imported on potatoes from, I. 546, II. 241, 460; insects beneficial to agriculture in, II. 480.

chilensis, Aphidius.

chilina, Pseudoparlatoria.

Chilo, on maize in Zanzibar, III. 125.

Chilo auricilia, on rice and sugar-cane in India, I. 170.

Chilo infuscatellus (Yellow Tip Borer), bionomics of, on sugar-cane in Java, I. 170, III. 26, 383–385.

Chilo simplex, on grain and sugar-cane in India and the Far East, I. 170, II. 139, 489, III. 174; on rice in Japan, I. 519.

Chilocorus angolensis, predaceous on *Aphis gossypii* in Uganda, II. 592.

Chilocorus bipustulatus, predaceous on scale-insects in Europe, III. 11, 143, 220, 251; introduced into California, III. 689, 738.

Chilocorus bivulnerus, predaceous on Coccids in Canada and U.S.A., I. 101, 511, II. 217, 436, 601, 673, III. 22, 417, 422.

Chilocorus cacti, predaceous on *Dactylopius confusus*, in U.S.A., I. 81.

Chilocorus circumdatus, predaceous on *Aulacaspis* spp. in Ceylon, III. 83, 168; introduced into Hawaii, III. 757.

Chilocorus discoideus, predaceous on *Coccus viridis* in Uganda, II. 59.
Chilocorus distigma, predaceous on *Chionaspis olivina*, in Eritrea, III. 432.
Chilocorus kuvanae, predaceous on *Chrysomphalus dictyospermi*, in Italy, II. 296.
Chilocorus melanoph'halmus predaceous on Coccids in Java, III. 318, 647.
Chilocorus orbus, predaceous on Aphids in U.S.A., I. 242, III. 142.
Chilocorus schiödtei, predaceous on *Pulvinaria jacksoni* in Nigeria, III. 164.
Chilocorus similis, predaceous on scale-insects in Japan and Peru, I. 62, 323; predaceous on *Aspidiotus perniciosus*, II. 165.
Chilomenes lunata, predaceous on Aphids in Africa, II. 107, 154, 581, 592, III. 164.
Chilomenes sexmaculata, predaceous on *Psylla isitis* in India, I. 45; parasitised by *Homalotylus obscurus* var. *californicus* in U.S.A., III. 724.
Chilomenes vicina, predaceous on Aphids in Tropical Africa, II. 107, 396, 631, III. 164.
Chiloneurus, parasite of *Aspidiotus perniciosus* in U.S.A., III. 473.
Chiloneurus obscurus, sp. n., parasite of *Saissetia oleae* in Eritrea, III. 432.
China, pests of citrus in, I. 278, II. 311; *Xyleborus coffeae* on coffee in, I. 351; *Xyleborus cognatus* on *Hevea brasiliensis* in, I. 351; *Ailanthus glandulosa* imported into Europe from, II. 646; original home of *Aspidiotus perniciosus*, II. 216; pests from, intercepted in California, III. 558, 690, 739.
Chinaberry, *Aleurodes citri* on, in Florida, I. 186, III. 23.
Chinch Bug (see *Blissus leucoptera*).
Chinch Bug, False (see *Nysius angustatus*).
chinensis, *Bruchus* (*Pachymerus*); *Melanauster*.
Chinese Arbor-vitae (*Thuya orientalis*), *Pseudococcus ryani* on, in California, II. 436.
Chinese Ink-berry (see *Cestrum*).
Chinese Plum (see *Noronhia emarginata*).
Chinquapin, pests of, in U.S.A., II. 600, III. 249, 671.
chionaspidis, *Arrhenophagus*; *Azotus*.
Chionaspis, new parasite of, from Africa, III. 433; on cedar in California, III. 275.
Chionaspis americana, parasitised by *Leucopis nigricornis* in Italy, I. 392.
Chionaspis angusta, in Australia, III. 548.
Chionaspis aspidistrae (see *Hemichionaspis*).
Chionaspis citri (Citrus Snow Scale, Orange Snow Scale, White Scale), remedies against, in Britain, III. 676; bionomics of, on citrus, etc., in Br. Guiana, I. 130, II. 417, 520; intercepted on citrus fruit in California, III. 494, 558, 739; on citrus in Fiji, III. 548; in the West Indies, I. 83, 251, II. 78, 87, 143, III. 650.
Chionaspis difficilis, parasitised by *Azotus chionaspidis* in Japan, II. 495.
Chionaspis dilatata, on *Pandanus odoratissimus* in Australia, III. 167.
Chionaspis dubia, on *Adiantum* in Fiji, III. 548.
Chionaspis euonymi, on jasmine and *Euonymus* in Italy, III. 124; bionomics of, on *Euonymus japonicus* in Russia, I. 363; on *Euonymus* in U.S.A., III. 515.
Chionaspis frenchi, sp. n., on *Eucalyptus* in Australia, III. 548.
Chionaspis funtumiae, sp. n., on *Funtumia latifolia* in Uganda, II. 276, 592.
Chionaspis furfura (Scurfy Scale), in Canada and U.S.A., I. 140, 276, 280, II. 3, III. 141, 182, 192; on currants in Russia, III. 204.
Chionaspis inday, ants not associated with, in the Seychelles, II. 567.
Chionaspis lintneri (Lintner's Scale), food-plants of, in N. America, I. 140.
Chionaspis madiunensis, on sugar-cane, III. 317.
Chionaspis malloti, sp. n., on *Mallotus philippinensis* in Ceylon, III. 168.
Chionaspis nigerensis, sp. n., on *Xymenia americana* in W. Africa, I. 14.
Chionaspis olivina, on olive in Africa, III. 432; natural enemies of, III. 432, 433.
Chionaspis ortholobis, parasitised by *Leucopis nigricornis* in U.S.A., I. 392.
Chionaspis pinifoliae (Pine Leaf Scale), bionomics of, on pines in U.S.A., I. 51, 87, 392, II. 245, 553, III. 16, 192, 357, 738.
Chionaspis quercus, on *Quercus* spp. in California, II. 553, III. 150.

Chionaspis saccharifolii, on sugar-cane in Java, III. 318, 646.
Chionaspis salicis, on currants, etc., in Britain, I. 236, 464, III. 346, 715; on willow in Italy, III. 124; on blueberries in Russia, III. 223.
Chionaspis salicis-nigrae (Sweet Birch Scale), in California, II. 245, 663.
Chionaspis simplex, on bamboo in Ceylon, III. 755.
Chionaspis substriata, on palms in Uganda, I. 49.
Chionaspis tegalensis, bionomics of, on sugar-cane in Java, III. 317–320; on sugar-cane in Mauritius, I. 31, II. 46, 612.
Chionaspis unilateralis, on *Thrinax* in Barbados, II. 533.
Chionaspis usambarica, sp. n., in E. Africa, II. 429.
Chionaspis wistariae, imported into U.S.A. on wistaria from Japan, III. 455, 558.
Chir Pine (see *Pinus longifolia*).
Chiracanthium inclusum, predaceous on *Gargaphia solani* in U.S.A., III. 576.
Chironomus, *Empusa* spp. infesting, II. 377.
Chiropachis colon, parasite of *Scolytus* (*Eccoptogaster*) *rugulosus* in Russia, I. 536.
Chlaenius tomentosus, predaceous on *Crambus caliginosellus* in U.S.A., II. 525.
Chlamydatus associatus, disseminating fire-blight in U.S.A., II. 288.
Chlamydatus pullus, on wheat, etc., in Russia, III. 480.
Chlamydozoa, II. 102.
Chloantha polyodon (see *Actinotia*).
chlorana, *Earias*.
Chloridea, bionomics of, in Dutch East Indies, I. 56, III. 644.
Chloridea dipsacea, on lucerne, etc., in Russia, I. 460, 527, II. 74, 212, 715, III. 46, 205, 403, 639; on chicory, I. 256.
Chloridea obsoleta (Bollworm, Tomato Maggot, Corn-ear Worm), on cotton and tobacco in Africa, I. 272, 289, 302, II. 2, 107, 277, III. 360; intercepted on tomatoes in California, III. 626; on rice and tobacco, etc., in the Far East, II. 489; on maize, etc., in France, I. 256, 409; on tobacco in Hawaii II. 629; on maize in the Philippines, I. 154; on beet, cotton, etc., in Russia, II. 74, 248, 262, 314, 423, 515, 649, 715; on maize and tobacco in Sumatra, I. 13, III. 202; bionomics of, on maize etc. in U.S.A., I. 16, 180, 325, II. 115, 160, III. 90, 136, 153, 176, 193, 426, 447, 449, 450, 470, 472, 513, 709, 753; on potatoes in Victoria, II. 118; on cotton and maize in the West Indies, II. 87, III. 477, 518, 555; natural enemies of, I. 16, II. 423, 515, 630, III. 153, 471, 513.
Chloridea virescens (Tobacco Bud Worm), not controlled by birds in Trinidad, II. 574.
chlorion, *Earias* (see *E. insulana*).
chloris, *Baris*; *Parasa*.
Chlorita bipunctata, on cotton and elms, in Russia, II. 314.
Chlorita fascialis, on cotton in E. Africa, I. 246, 415, II. 581.
Chlorita solani, III. 287.
Chlorita viridula, on potato in England, III. 287.
Chlorochroa uhleri, food-plants of, in New York, III. 459.
Chloroclystis rectangulata, on apples in England, II. 563; on pears and apples in Russia, III. 225, 543.
Chloroform, against *Oecodema cephalotes*, II. 224; against vine pests, I. 10, III. 211; for collecting insects, II. 638; as an insecticide, III. 284.
Chlorophanus graminicola, on poplars and willows in Russia, III. 222.
Chlorops, on cereals in France, I. 226; on cereals in Hungary, II. 526.
Chlorops cereris, on oats in France, III. 428.
Chlorops guerini, on oats in France, III. 428.
Chlorops messoria, on oats in France, III. 428.
Chlorops taeniopus, in Denmark, III. 245, 698; on cereals in Norway, III. 107, 147; on cereals in Russia, II. 43, 172, 341, III. 339, 340, 481, 600, 601.
chlorosticta, *Angitia*.
choerophyllella, *Epermenia*.
Chocolate, *Ptinus tectus* infesting, III. 277.
Chocolate Moth (see *Ephestia elutella*).
Choisya ternata, *Aulacaspis pentagona* on, I. 222.
Chokeberries, *Lymantria dispar* on in U.S.A., III. 668.
Cholam (see Sorghum).
Cholam Bug (see *Calocoris angustatus*).
Cholam Fly, in Madras, III. 174.
cholodkovskyi, *Macrosiphum*.
chondrillana, *Tortrix* (*Pandemis*).

Chordeiles virginianus, destroying noxious insects in U.S.A., I. 430, III. 710.
chorea, Lonchaea.
Choreutis parialis (see *Hemerophila pariana*).
Choreutis pariana (see *Hemerophila*).
Chorinaeus tricarinatus, parasite of *Hyponomeuta malinellus* in Russia, I. 347.
Chorispora tenella, attractive to *Epicometis hirtella* in Russia, II. 44.
Chorizagrotis (see *Euxoa*).
Chorizagrotis introferens (see *Euxoa auxiliaris*).
Chorizagrotis soror (see *Euxoa auxiliaris*).
Chorthippus albomarginatus, bionomics of, in Russia, III. 636.
Chorthippus dorsatus, bionomics of, in Russia, III. 636.
Chorthippus elegans (see *C. albomarginatus*).
Chorthippus (*Stenobothrus*) *pulvinatus*, in Russia, III. 401, 636.
Chortophaga viridifasciata, bionomics of, on fruit in Missouri, III. 181; parasitised by *Sarcophaga* spp. in U.S.A., III. 82.
Chortophila (*Anthomyia, Pegomyia, Phorbia*) *brassicae* (Cabbage Fly, Cabbage Maggot, Cabbage Root Maggot), bionomics of, in Algeria, II. 284; bionomics of, in Britain, I. 387, III. 616–618, 627; on cabbage, etc., in Canada, I. 405, 412, 413, II. 665, 676, 677, III. 68, 70, 71, 72, 327, 565; on turnip and cabbage in Denmark, III. 246, 698; bionomics of, in France, III. 1, 189; on cabbage in Holland, I. 386, II. 641, III. 200; in Russia, I. 395, 492, II. 198, 266, 341, 442, III. 100, 101, 104, 204, 218, 222, 390, 393, 401, 443, 544, 606, 610, 701; on cabbage in Sweden, III. 107; bionomics and control of, in U.S.A., I. 132, II. 160, 188, III. 163, 369, 370.
Chortophila cana, parasite of locusts in Algeria, III. 428.
Chortophila cilicrura, on onions and garlic in Russia, III. 544.
Chortophila (*Anthomyia*) *funesta*, on lupins in Denmark, III. 246; on sugar-cane and lucerne in Russia, I. 527, III. 606.
Chortophila furcata, on onions and garlic in Russia, III. 544.
Chortophila fusciceps, on turnips etc. in Canada, II. 665, III. 43, 68, 565, 625; on onions and garlic in Russia, III. 544; on beans in U.S.A., III. 709.
Chortophila (*Adia*) *genitalis*, bionomics of, in Russia, II. 350, 351, III. 230.
Chortophila gnava, on lettuce, I. 504.
Chortophila (*Anthomyia*) *platura*, on shalot in France, I. 256.
Chortophila sepia, on grain in Hungary, II. 526.
Chortophila trichodactyla, on cucumber in Silesia, III. 436.
Chortophila vicina (Beet Leaf-miner), bionomics of, in Canada, II. 665.
Christmas Bush (see *Eupatorium odoratum*).
Chromaphis juglandicola (European Walnut Aphis), bionomics of, in California, II. 582, 599, III. 141.
chromataria, Earias.
Chromate of Lead (see Lead Chromate).
Chromium, experiments suggested with, as an insecticide, III. 68.
Chromoderus albidus (see *C. fasciatus*).
Chromoderus declivis, distribution of, II. 465.
Chromoderus fasciatus, on beet in Europe, II. 90; on beet in Russia, II. 465.
Chrotogonus, on tobacco in Nyasaland, II. 277.
Chrysalidocarpus, not attacked by Rhinoceros beetles in the Seychelles, II. 568.
chrysanthemi, Aphis; *Macrosiphum*; *Phytomyza* (*Napomyza*); *Plagiognathus.*
chrysanthemicolens, Nectarophora.
Chrysanthemum, Aphids on, in Africa, II. 276, III. 748, 749; pests of, in Britain, III. 633, 660, 746, 747; pests of, in Canada and U.S.A., I. 55, 101, 241, II. 83, 491, III. 372, 454, 566; pests of, in France, I. 451, II. 130; *Aphelenchus ritzema-bosi* on, in Holland, III. 740; pests of, in Russia, II. 424; pests of, in Sweden, III. 250; *Ceratitis capitata* imported into U.S.A. on, from Japan, III. 567.
Chrysanthemum atratum, Misospatha hypogaea on, in U.S.A., III. 454.
Chrysanthemum corymbosum, II. 64; *Misospatha hypogaea* on, in U.S.A. III. 454.
Chrysanthemum frutescens, pests of, in Sweden, III. 251.
Chrysanthemum hybridum, pests of, in Sweden, III. 251.
Chrysanthemum indicum, pests of, in Sweden, III. 251.
Chrysanthemum japonicum, Misospatha hypogaea on, in U.S.A., III. 454.

Chrysanthemum leucanthemum (Ox-eye Daisy), *Aphis chrysanthemi* on, in England, III. **633, 762**; *Crambus caliginosellus* on, in Europe, II. **524**; *Misospatha hypogaea* on, in U.S.A., III. **454**.

Chrysanthemum segetum, *Macrosiphum sonchi* on, in Europe, III. **748**.

Chrysanthemum Leaf-miner (see *Phytomyza chrysanthemi*).

Chrysanthemum Midge (see *Misospatha*).

Chryseida inopinata, parasite of *Oncideres putator* in U.S.A., III. **475**.

chrysitis, *Phytometra*.

chrysobalani, *Aonidiella*.

Chrysobalanus, pests of, in Senegal, I. **91**, II. **354**.

Chrysobothris, in Saskatchewan, III. **507**; destroyed by woodpeckers in U.S.A., III. **559**.

Chrysobothris azurea, on *Wistaria chinensis* in Iowa, III. **495**.

Chrysobothris chrysoela, on persimmon in Carolina, I. **161**.

Chrysobothris dentipes, on pines in Carolina, I. **160**.

Chrysobothris femorata (Flat-headed Apple-tree Borer), bionomics and control of, in Canada and U.S.A., I. **48, 280, 404, 452, 467**, III. **179, 552, 671, 738**.

Chrysobothris floricola, on pines in North Carolina, I. **160**.

Chrysobothris pusilla, on pines in Carolina, I. **161**.

Chrysocharis, parasite of *Agromyza pusilla* in Hawaii, III. **363**; parasite of *Phytomyza albiceps* in New Zealand, III. **722**; parasite of *Agromyza scutellata* in U.S.A., III. **133**.

Chrysocharis ainsliei, parasite of *Agromyza pusilla* in U.S.A., II. **46**.

Chrysocharis livida, parasite of *Leucoptera coffeella* in Porto Rico, III. **517**.

Chrysocharis parksi, parasite of *Agromyza pusilla* in U.S.A., II. **46**.

chrysocephalus, *Psylliodes*.

Chrysococcyx cupreus, destroying *Anaphe* in the Belgian Congo, II. **548**.

chrysoderes, *Agrilus*.

chrysoela, *Chrysobothris*.

chrysographella, *Ancylolomia*.

Chrysomela fastuosa, food-plants of, in Germany, II. **679**.

Chrysomela sanguinolenta, *Coccobacillus* infections in, I. **336**.

chrysomelina, *Epilachna*.

Chrysomphalus, control of, in Italy, II. **268**; introduction of natural enemies of, into Italy, II. **86**; imported into California on lemons from Mexico, III. **420**; new species of, on *Araucaria* spp. in Peru, III. **135**; natural enemies of, in U.S.A., I. **427**; on *Limonia alata*, III. **725**.

Chrysomphalus affinis, sp. n., in Pretoria and French Guinea, II. **354**.

Chrysomphalus aonidum (*Aspidiotus ficus*) (Red-spotted Scale), on citrus in S. Africa, III. **502**; on coconut in Australia, III. **167**; on citrus in Br. Guiana, II. **417**; on citrus in Egypt, II. **104, 605**; on citrus in Florida, I. **188**, III. **444**; danger of introduction of, into Hawaii, I. **374**; on citrus in India, I. **279**; parasitised by *Pseudhomalopoda prima* in Jamaica, III. **724**; on coffee in Java, III. **646, 648**; food-plants of, in the Seychelles, I. **129**, II. **269, 566**; intercepted on plants imported into U.S.A., III. **117, 420, 469, 494, 558, 625, 690, 739**; on citrus in the West Indies, I. **251**, II. **78**, III. **412, 724**.

Chrysomphalus aurantii (Red Scale, Orange Scale), on coconut, sisal and tea in E. Africa, I. **415**; on citrus, etc., in S. Africa, II. **299, 595**, III. **502**; imported into Algeria, III. **102**; food-plants of, in Australia, II. **584**, III. **527**; legislation against, in Australia, II. **83**; declared a pest in Br. Columbia, I. **48**; on citrus in Br. Guiana, II. **417**; intercepted on plants imported into California III. **494, 558, 690, 739**; bionomics of, on citrus in California and Arizona, I. **180, 310**, III. **135, 357, 512, 622, 689**; on mulberries in Ceylon, I. **89**; on citrus in Egypt, II. **605**; on citrus in India, I. **279**; on fruit in Japan, I. **520**; parasite of, in the Philippines, II. **287**; on orange in Spain, III. **102**; quarantine measures against, in U.S.A., I. **85**; on citrus in the W. Indies, I. **251, 258**, II. **87**.

Chrysomphalus aurantii var. *citrinus* (California Yellow Scale), on citrus in California, III. **357, 512, 622, 689**; on oranges imported into California, III. **558**; on fruit in Japan, I. **520**; quarantine measures against, in U.S.A., I. **85**.

Chrysomphalus (*Targionia*) *biformis*, on orchids in Br. Guiana, II. 417; imported into U.S.A. on orchids from Central America, III. 354, 455, 469, 739.
Chrysomphalus (*Aspidiotus*) *bromeliae*, on pineapple in the Seychelles II. 269.
Chrysomphalus dictyospermi, in S. Africa, II. 300; on oranges in Algeria, II. 230; control of, in Italy, I. 219, 278, II. 585, 609, III. 143; on citrus in Russia, III. 223; on citrus in Spain, I. 99, 278, 312, III. 143; in U.S.A., III. 144, 349; on plants imported into U.S.A., II. 460, III. 117, 354, 469.
Chrysomphalus dictyospermi var. *pinnulifera*, bionomics and control of, in Italy, I. 380, II. 97, 296, III. 430, 590, 763; on citrus in Spain, I. 297.
Chrysomphalus fodiens (see *Aspidiotus*).
Chrysomphalus greeni, sp. n., in French Guiana, II. 353.
Chrysomphalus minor (see *C. dictyospermi*).
Chrysomphalus obscurus, on oak in U.S.A., III. 709.
Chrysomphalus opimus, sp. n., on olive in Africa, III. 432.
Chrysomphalus personatus, on rubber in Br. Guiana, II. 569, 417.
Chrysomphalus rossi, on *Leptospermum* etc. in South Africa, II. 300, III. 502.
Chrysomphalus tenebricosus, on maple in U.S.A., III. 709.
Chrysopa (Lacewing Flies), predaceous on other insects, I. 26, 127, II. 49, 80, 107, 109, 154, 282, 312, 360, 416, 532, 680, 697, III. 45, 138, 271, 308, 318, 415, 432, 439, 648, 704; South American species of, I. 229.
Chrysopa alcestes, predaceous on *Psylla isitis* in India, I. 45.
Chrysopa aspersa, bionomics of, in France, II. 90.
Chrysopa californica, predaceous on noxious insects in California, I. 240, II. 437, III. 142, 271, 689.
Chrysopa collaris, predaceous on *Sipha flava* in Porto Rico, III. 134, 674.
Chrysopa incongrua, predaceous on Aphids in the French Sudan, II. 396, 631.
Chrysopa majuscula, predaceous on *Monellia caryae* in California, III. 142.
Chrysopa nigricornis, parasites of, in S. Carolina, III. 25.
Chrysopa oculata, parasites of, in S. Carolina, III. 25; predaceous on noxious insects in U.S.A., II. 704, III. 471, 578.
Chrysopa oralis, predaceous on Aphids in the French Sudan, II. 396, 631.
Chrysopa perla, bionomics of, in France, II. 90; predaceous on vine pests in Russia, II. 358, 720, III. 211, 220, 405.
Chrysopa plorabunda, predaceous on *Blissus leucoptera* in U.S.A., II. 227.
Chrysopa quadripunctata, predaceous on *Tetranychus bimaculatus* in U.S.A., I. 353.
Chrysopa rufilabris, parasites of, in S. Carolina, III. 25; predaceous on *Tetranychus telarius* in U.S.A., III. 64.
Chrysopa septempunctata, bionomics of, in France, II. 90; predaceous on vine pests in Russia, III. 211.
Chrysopa vuilleti, predaceous on Aphids in the French Sudan, II. 396, 631.
Chrysopa vulgaris, bionomics of, in France, II. 90, 91; predaceous on vine moths in France, I. 416, 524; a doubtful enemy of *Polychrosis* in Italy, III. 127; predaceous on vine pests in Russia, III. 211, 405.
chrysopae, *Telenomus*.
Chrysophagus compressicornis, parasite of *Chrysopa* in S. Carolina, III. 25; parasite of Syrphids in S. Carolina, III. 25.
chrysophyllae, *Philippia*; *Prays*.
Chrysophyllum cainito (Star Apple), *Pseudococcus filamentosus* on, in E. Africa, II. 146; *Ceratitis capitata* on, in Hawaii, I. 374; scale-insect fungus on, in the W. Indies, I. 76.
Chrysophyllum oliviforme (Jamaica Damson), *Ceratitis capitata* on, in Hawaii, I. 374.
Chrysopiella, in S. America, I. 229.
chrysopila, *Hermetia*.
Chrysopilus nubecula, parasite of locusts in Algeria, III. 428.
Chrysoplatycerus splendens, parasite of mealy bugs in California, II. 436.
chrysorrhoea, *Euproctis* (*Porthesia*).
chrysosticta, *Angitia*.
Chyliza persicorum, on fruit in Argentina, I. 310, 311.
Cicada, from the Malay Archipelago, I. 222; in New South Wales, I. 503; in U.S.A., I. 84; parasites of, III. 252, 452.

Cicada cinctifera, food-plants of, in Arizona, III. **512.**
Cicada septemdecim (see *Tibicen*).
Cicadula, on tomato in Florida, III. **179.**
Cicadula (*Jassus*) *sexnotata*, in Maine, III. **530**; on cereals in Russia, I. **487**, II. **43**, III. **401, 481**; on rye in Sweden, III. **525.**
cichorii, *Aphis.*
Cicindela sexpunctata, preying on *Leptocorisa varicornis* in the Far East, II. **489.**
Ciconia alba (White Stork), destroying insects, II. **574**, III. **359, 361, 720.**
Cidaria albicillata, on raspberry in France, II. **622.**
Cigar Case-bearer (see *Coleophora fletcherella*).
Cigarette Beetle (see *Lasioderma serricorne*).
ciliatus, *Rhizotrogus.*
cilicrura, *Chortophila.*
Cimbex americana (Elm Sawfly), in Connecticut, I. **101.**
Cimbex amerinae, on *Salix acutifolia* in Russia, II. **45.**
Cimbex betulae (see *C. femorata*).
Cimbex femorata, on birch in Russia, III. **389, 401.**
Cimbex femorata var. *silvarum*, on birch in Russia, III. **389.**
cimbicis, *Sarcophaga.*
cimiciformis, *Paracleutus.*
Cinchona, pests of, in E. Africa, I. **414, 415**; pests of, in Java, I. **351**, III. **313, 632, 662**: *Eriococcus cockerelli* on, in Mexico, II. 138.
Cinchona succirubra, *Phassus purpurescens* on, in Ceylon, III. **301.**
cinchonae, *Ips.*
cincta, *Mylabris*; *Tephritis*; *Thyrsocera*; *Vespa.*
cinctella, *Oxthyrea.*
cinctus, *Emphytus*; *Metopodontus*; *Milyas.*
cinerarius, *Biston.*
cinerea, *Botrytis*; *Epicauta*; *Monilia.*
cinereus, *Hesperophanes*; *Melanoplus.*
cingala, *Heterusia.*
cingulata, *Oncideres*; *Protoparce*; *Rhagoletis.*
cingulatus, *Dysdercus*; *Emphytus*; *Oncideres.*
Cinnamomum camphora (see Camphor).
Cinnamon, pests of, in Ceylon, II. **151**, III. **168, 755**; *Helopeltis* on, in Java, III. **662**; *Eucalymnatus tessellatus* on, in the Seychelles, I. **129, 474**, II. **566**; *Selenaspidus articulatus* imported into U.S.A. on, from Colombia, III. **455**; as an insectifuge, I. **10**, III. **211.**
Cinnamon Fungus (see *Verticillium heterocladum*).
cinnamoni, *Neolecanium*; *Parlatoria.*
Cinnamylaldehyde, cost of, against thrips, II. **271.**
Cinxaelotus erythrogaster, parasite of *Polychrosis botrana* in Italy, III. **497.**
Cionus fraxini, on ash in France, III. **694.**
Cionus scrophulariae, destroyed by parasites in Russia, III. **400.**
circumcincta, *Plagiodera.*
circumdatus, *Chilocorus.*
circumflexa, *Phytometra* (*Plusia*).
circumflexum, *Macrosiphum.*
Cirphis, parasitised by *Horismenus urichi* in Mexico, I. **184.**
Cirphis fragilis, on wheat in India, I. **169.**
Cirphis humidicola (Sugar-cane Bud worm) in Trinidad, II. **574.**
Cirphis latiuscula, natural enemies of, on sugar-cane in Porto Rico, I. **184**, II. **49, 496**; bionomics of, in Texas, III. **683.**
Cirphis loreyi, on rice and sugar-cane in the Far East, I. **169**, II. **489**; on sugar-cane in Mauritius, I. **31**; on maize in Nigeria, III. **166**; bionomics of, on maize in Rhodesia, III. **360**; on maize in Zanzibar, III. **125.**
Cirphis multilinea, bionomics of, in Texas, III. **683, 684.**
Cirphis phaea, on maize in S. Nigeria, II. **107.**
Cirphis (*Heliophila*, *Leucania*) *unipuncta* (Army Worm), bionomics and control of, on cereals in Canada and U.S.A., II. **361**, III. **18, 68, 69, 71, 85, 249, 290, 301, 355, 368, 370, 372, 423, 450, 452, 458, 516, 531, 551, 552, 673, 678, 683, 708, 711**; parasitised by *Ichneumon koebelei* in Hawaii, III. **682**; on cereals and sugar-cane in India and the Far East, I. **169**, II. **68, 489, 490**; on sugar-cane in Mauritius, I. **31**; destroyed by birds in U.S.A., II. **585**, III. **249.**
Cirrospilus flavoviridis, parasite of *Agromyza* spp. in U.S.A., II. **46, 288.**
Cirrospilus ovisugosus, sp. n., parasite of *Poecilocapsus lineatus* in Canada, III. **553.**
Cirsium, Aphids on, in France, III. **112.**

Cirsium arvense (*Cnicus arvensis*) (Creeping Thistle), *Euxoa segetum* and *Feltia exclamationis* on, in Russia, II. 212, 315, III. 536; *Acidia heraclei* on, in Britain, II. 627.
Cistela nigrita (see *Podonta*).
cisteliodes, Helops.
Citaria islandica (Iceland Moss), decoction of, against Lepidopterous eggs, III. 394.
Citellus (*Spermophilus*) *guttatus* (Zizel Mouse), in Russia, III. 230, 339, 401.
Citharexylum quadrangulare (Fiddlewood), *Heliothrips haemorrhoidalis* on, in Barbados, I. 97.
citrana, Tortrix.
citrella, Phyllocnistis.
citri, Aleurodes (*Dialeurodes*); *Aphis*; *Chionaspis*; *Phomopsis*; *Prays*; *Pseudococcus* (*Dactylopius*); *Scirtothrips* (*Euthrips*).
citricidus, Myzus.
citricola, Coccidophilus; *Coccus*; *Mytilaspis* (see *Lepidosaphes beckii*); *Pulvinaria.*
citrina, Earias.
citrinus, Aspidiotiphagus; *Rhopoideus.*
citripes, Cosmocena (see *Polynema longipes*).
Citromyces glaber, infesting vine moths in Russia, III. 211.
Citron (*Citrus medica genuina*), scale-insects on, in California, II. 435, 436, III. 689; *Anastrepha ludens* on, in Mexico, II. 77; pests of, in Porto Rico, I. 389; *Coccus viridis* on, in the Seychelles, I. 129.
Citronella, Oil of, against Argentine ants, I. 327; relative attractiveness of, for *Ceratitis capitata*, III. 28.
Citrullus vulgaris (see Watermelon).
Citrus, pests of, in E. Africa and Uganda, I. 49, 247, 258, 415, II. 59, 146, 571, III. 125, 748; pests of, in S. Africa, II. 299, 321, III. 502; prohibition of removal of, when infested with *Chrysomphalus aurantii* in Australia, II. 83; pests of, in Australia, I. 502, II. 83, 584, 652, III. 503; *Papilio demodocus* on, in the Belgian Congo, III. 650; pests of, in Brazil, II. 173, 174, 175; quarantine measures against *Aleurodes nubifera* on, in Br. Columbia, I. 85; pests of, in Br. Guiana, II. 416, 417, 569; pests of, in Ceylon, II. 306, 644, 651, 652, III. 157; pests of, in Egypt, I. 171, 392, II. 103, 505, 605, III. 173; fumigation measures for, in Egypt, II. 103, 605; Coccids infesting, in Fiji, III. 548; pests of, in the Far East, II. 490; *Icerya purchasi* on, in France, I. 171, II. 421; pests of, in India, II. 487; pests of, and their control in Italy, I. 278, 320, 380, II. 97, 268, 296, 347, 412, 585, 604, 609, III. 143, 430, 763; new Coccids on, in Japan, III. 127; quarantine measures against pests of, in Mauritius, I. 399; pests of, in S. Europe, III. 143; *Anastrepha ludens* on, in Mexico, II. 77; not attacked by termites in Natal, I. 13; pests of, in Peru, I. 516, III. 135; pests of, in S. Rhodesia, I. 466, II. 595, 596, III. 613; pests of, in the Seychelles, I. 474, II. 566; pests of, in U.S.A., I. 143, 179, 186, 267, 309, 324, 325, II. 113, 129, 130, 152, 247, 347, 435, 436, 438, 585, III. 22, 85, 135, 325–326, 330, 332, 357, 419, 444, 457, 493, 512, 586, 621, 623, 624, 625, 689; pests imported on, into U.S.A., III. 420, 455, 512, 558, 739; restrictions on importation of, into U.S.A., III. 364; pests of, in the West Indies, I. 83, 329, 389, II. 50, 87, 88, 143, 145, 603, III. 22, 73, 412, 518, 585, 650; species of *Papilio* infesting, II. 310, 311, 487, III. 125, 650; (see Orange, Lemon, etc.).
Citrus aurantium (see Orange).
Citrus bergamina, Pantomorus fulleri on, in California, II. 347.
Citrus decumana (see Grape Fruit and Pomelo).
Citrus deliciosa, pests of, in Brazil, II. 174, 175; not attacked by *Pantomorus fulleri* in California, II. 347.
Citrus japonica, Ceratitis capitata on, in Hawaii, I. 374, III. 412.
Citrus limonum (see Lemon).
Citrus medica, not attacked by *Ceratitis capitata* in Hawaii, I. 511.
Citrus medica acida (see Lime).
Citrus medica genuina (see Citron).
Citrus medica limon (see Lemon).
Citrus nobil s (see Mandarin and Tangerine).
Citrus trifoliata, Aspidiotus perniciosus on, in U.S.A., II. 390.
Citrus vulgaris, not attacked by *Pantomorus fulleri* in California, II. 347.
Citrus Butterfly (see *Papilio demoleus*).

Citrus Canker, in Louisiana, III. 382; legislation against importation of, into U.S.A., III. 364.
Citrus Codling Moth (see *Argyroploce leucotreta*).
Citrus Grey Scale (see *Coccus citricola*).
Citrus Mealy Bug (see *Pseudococcus citri*).
Citrus Psylla (see *Trioza*).
Citrus Red Spider (see *Schizotetranychus mytilaspidis*).
Citrus Snow Scale (see *Chionaspis citri*).
Citrus Thrips (see *Scirtothrips citri*).
Citrus Whitefly (see *Aleurodes citri*).
Cladius albipes (see *Priophorus padi*).
Cladius difformis, on strawberries in Holland, III. 743; on roses in Russia, II. 720.
Cladius padi (see *Priophorus*).
Cladius pectinicornis, on roses in Russia, II. 720.
Cladius viminalis (see *Trichiocampus*).
Cladobius farinosus, on *Lamium* in Italy, III. 54.
Cladognathus torrensis, in Queensland, III. 491.
Cladosporium, infesting *Aleurodes vaporariorum* in Britain, III. 501; associated with *Phorodon humuli* in California, I. 241; infesting *Chrysomphalus dictyospermi* var. *pinnulifera* in Italy, III. 763.
Cladosporium aphidis, infesting *Polychrosis botrana* in Italy, III. 497.
Cladosporium citri, intercepted on citrus in California, III. 739.
Cladosporium herbarium, associated with *Psylla pyricola* on pears in Britain, III. 281.
clandestina, Noctua (see *Agrotis unicolor*).
Clania crameri, on tea in India, III. 489.
Clania holmesi, on tea in India, III. 489.
Clania variegata, on tea and camphor in Ceylon, II. 597; on tea and coffee in the Far East, II. 490; on tea in India, III. 489.
Clanis soror, destroying *Tetranychus bioculatus* in India, I. 508.
clarescens, Acronycta.
claripennis, Phorocera (*Euphorocera*).
clathrata, Gerstaeckeria; *Phasiane*; *Sarcophaga.*
clausi, Hyalorhipis (*Leptopternis*).
clavata, Baccha.
Clavellaria amerinae, on willow in Bessarabia, III. 225.
clavifex, Rhabdophaga.
clavigera, Pseudaonidia.
clavipalpis, Athetis; *Rhopalopus.*
Clay-coloured Weevil (see *Otiorrhynchus picipes*).
Clayton Machine, for producing sulphur dioxide, II. 219, 224.
Cleigastra flavipes (see *Clidogastra*).
Clematis, Perilloides modestus on, in Canada, II. 665; *Epicauta* spp. on, in North Carolina, I. 243; *Hepialus lupulinus* on, in Holland III. 198; *Clysia ambiguella* on, in Switzerland, II. 632.
Clematis vitalba (Traveller's Joy), *Polychrosis botrana* on, in Russia, III. 210; *Thea vigintiduopunctata* on, in Sicily, II. 150.
cleoni, Bacillus.
Cleonus, on beetroot in Russia, I. 524.
Cleonus calandroides, on *Cakili edentula* in Maryland, III. 266.
Cleonus canescens, on peach in Colorado, III. 266.
Cleonus mendicus (see *Conorrhynchus*).
Cleonus piger, on beet in France, II. 90.
Cleonus punctiventris (see *Bothynoderes*).
Cleonus quadrilineatus, on *Arogallus lamberti* in Colorado, III. 266.
Cleonus sparsus (Radish Weevil), in Oregon, III. 266.
Cleonus sulcirostris (see *C. piger*).
Cleptes nitidulus (see *Diplolepis*).
clerkella, Lyonetia.
Clerodendron, not attacked by *Helopeltis* in the Gold Coast, II. 671.
Clerome gracilis, on *Rhopaloblaste* palms in Straits Settlements, II. 98.
Clerus formicarius, not an effective enemy of *Xyleborus fornicatus*, in Ceylon, I. 88; destroying vine moths in France, II. 607.
Clidogastra (*Cleigastra*) *flavipes*, on forage grass in Denmark, III. 247; on timothy grass in Norway, III. 107.
Clinocentrus, parasite of *Epinotia piceafoliana* in Maine, I. 200.
Clinodiplosis equestris, in Germany, II. 500.
Clinodiplosis oculiperda (see *Thomasia*).
Clinodiplosis pyricola, on pears in Holland, I. 386.
clinognathus, Pleurotropis.
Clisiocampa americana (see *Malacosoma*).
clisiocampae, Ablerus.
Clitoria, Tetranychus bimaculatus on, in Java, III. 632.
Clivina, on strawberry in N. S. Wales, III. 366.

Clodweed (*Scabiosa arvensis*), *Kakothrips robustus* on, in Britain, III. 279.
Closterocerus, parasite of *Agromyza scutellata* in U.S.A., III. 133.
Closterocerus insignis, parasite of *Oscinis theae* in Ceylon, III. 443.
Closterocerus utahensis, parasite of *Agromyza pusilla* in U.S.A., II. 46.
Clothes Moth (see *Tinea pellionella*).
Cloudy-winged Whitefly (see *Aleurodes nubifera*).
Clover, pests of, in Britain, I. 242, 434, III. 660; pests of, in Canada I. 87, 93, 400, 406, II. 25, 664, 676, III. 18, 69, 72, 368; pests of, in Denmark, III. 247, 699; *Dolycoris baccarum* on, in Finland, III. 208; pests of, in France, I. 227, II. 420, 577, 606; pests of, in Germany, II. 500, III. 102; pests of, in Italy, II. 511, 695, 687, III. 53, 524; *Phytometra orichalcea* on, in Rhodesia, III. 361; pests of, in Norway, III. 107; pests of, in Russia, I. 216, 483, II. 41, 43, 73, 198, 337, 340, 370, 372, 424, 465, 640, III. 8, 50, 112, 205, 206, 210, 223, 227, 309, 402, 481, 543, 641, 703; pests of, in U.S.A., I. 102, 182, 225, 243, 299, 430, 453, II. 45, 114, 169, 361, 536, 599, III. 114, 153, 185, 264, 266, 290, 300, 333, 351, 375, 423, 453, 457, 516, 566, 569, 574, 763; (see also *Trifolium*).
Clover Aphis (see *Aphis bakeri*).
Clover Bark-beetle (see *Hylastinus obscurus*).
Clover Cutworm (see *Scotogramma trifolii*).
Clover Hay Worm (see *Hypsopygia costalis*).
Clover Leaf Midge (see *Perrisia trifolii*).
Clover Leaf Weevil (see *Hypera punctata*).
Clover Midge (see *Amblyspatha ormerodi*).
Clover Mite (see *Bryobia praetiosa*).
Clover Root-borer (see *Hylastinus obscurus*).
Clover Seed Chalcid (see *Bruchophagus funebris*).
Clover Seed Midge (see *Perrisia leguminicola*).
Cloves, pests of, in Zanzibar, III. 124.
clypeata, Trigona.
Clysia ambiguella (Vine Moth), control of, in Algeria, III. 427; on vines in Austria-Hungary, II. 309, III. 497; bionomics and control of, in vineyards in France, I. 70, 71, 228, 311, 312, 337, 397, 415, 422, 451, 466, 523, 524, II. 16, 194, 195, 229, 233, 234, 297, 301, 400, 405, 409, 410, 411, 412, 421, 443, 444, 445, 450, 539, 540, 550, 551, 552, 553, 557, 587, 589, 611, 685, 686, III. 522, 561, 562, 614, 616; in Germany, I. 222, 393, 461, 462, II. 454, 455, 499, 668, III. 496; in Greece, I. 409; in vineyards in Italy, II. 635, 666, 679, III. 113, 124, 387, 497, in vineyards in Luxemburg, I. 243, 332, 337, 356, 472, II. 135, 538, 631, 632, 680, 681; on vines in Russia, I. 461, II. 355, 428, III. 112, 209, 226, 395, 477, 538, 602, 701; in Switzerland, I. 336, II. 452, 453, 538, 586, 605, 682; general bionomics of, I. 5–7; natural enemies of, I. 524, II. 90, 91, 405, 409, 410, 589, 607, III. 211, 497; effect of meteorological conditions on, I. 466, 523, II. 301, 589, III. 210; remedies against, I. 7, 8, 9, 10, 422, 423, 462, II. 16, 135, 194, 211, 233, 234, 297, 301, 309, 336, 355, 400, 405, 411, 444, 452, 453, 537, 538, 551, 552, 553, 557, 586, 607, 631, 632, 633, 635, 658, 666, 681, 682, 683, 686, III. 211, 496, 522, 523, 561, 562, 563, 614, 615, 616.
clytia, Papilio.
Clytra taxicornis (see *Labidostomis*).
Clytus, in Russian forests, III. 228; in France, II. 195.
Clytus floralis, on lucerne in Russia, II. 262.
Clytus varius, in vineyards in France, II. 196.
c-nigrum, Agrotis (Noctua).
Cnaphalocrocis medinalis, on rice in India and the Far East, I. 170, II. 69, 489.
Cnaphalodes strobilobius (see *Chermes*).
cnejus, Catochrysops.
Cneorrhinus geminatus (see *C. plagiatus*).
Cneorrhinus (Philopedon) plagiatus, food-plants of, in Britain, III. 501; on potatoes in Denmark, III. 247; on fruit trees, etc., in France, II. 449, 609; on vegetables and roses in Holland, III. 198.
Cnephalia bucephala, parasite of *Euxoa segetum* and *Feltia exclamationis* in Russia, I. 540, II. 212.
Cnephasia genitalana, in Britain, III. 277.
Cnephasia minorana, on *Corylus* in Russia, II. 672.
Cnethocampa herculeana (see *Thaumetopoea*).

Cnethocampa processionea, destroying *Aporia crataegi* and *Euproctis chrysorrhoea* in Bessarabia, II. 42.
Cnicus arvensis (see *Cirsium*).
Cnidocampa flavescens, on plants from Japan in U.S.A., III. 455.
Coal Oil, against *Cirphis unipuncta*, III. 18, 369.
Coal Tar, against rose Aphids, I. 271, 520; against Argentine ants, I. 327; against *Aulacaspis pentagona*, II. 123; against *Blissus leucoptera*, III. 510; against wood-boring beetles, I. 423, 424, II. 592, III. 649, 672; against peach-borers, II. 23, III. 381; against termites, I. 465, II. 597, III. 379; against thrips, II. 118, III. 470; use of, as an insecticide, I. 195; disinfectant and germicidal value of, III. 282.
coarctata, Hylemyia (*Anthomyia, Leptohylemyia*).
Coast Live Oak (see *Quercus agrifolia*).
Coca (*Erythroxylon coca*), *Mecostylus vittaticollis*, on, in E. Africa, I. 414; pests of, in Java, III. 312; pests of, in Venezuela, II. 462.
cocci, Diadiplosis (*Karschomyia*).
coccicola, Ophionectria.
Coccidencyrtus ensifer, parasite of *Aspidiotus juglans-regiae* in U.S.A., III. 724.
coccidivora, Androdiplosis; *Diadiplosis*; *Laetilia.*
Coccidomyia, destroying Coccids, III. 134.
Coccidophilus citricola, preying on Coccids in S. America, I. 350, II. 480.
Coccidophilus citricus, preying on Coccids in Buenos Aires, II. 207.
Coccidoxenus portoricensis, sp. n., parasite of *Ceroplastes* (wax scale) in Porto Rico, II. 288.
Coccinella abdominalis, predaceous on *Phorodon humuli* in U.S.A., I. 242.
Coccinella bipunctata (see *Adalia*).
Coccinella californica, predaceous on Aphids in U.S.A., I. 242, III. 760.
Coccinella conglobata, predaceous on Aphids in Russia, III. 481, 704.
Coccinella conglobata var. *gemella*, predaceous on Aphids in Russia, III. 220.
Coccinella convergens (see *Hippodamia*).
Coccinella decempunctata, predaceous on *Phylloxera*, III. 405.
Coccinella juliana, predaceous on walnut Aphids in U.S.A., III. 142.
Coccinella novemnotata, bionomics of, in U.S.A., I. 353, 511, II. 131, 697, III. 115, 132.
Coccinella ocellata, predaceous on *Lachnus pinicola* in Britain, I. 120.
Coccinella octodecimpunctata, predaceous on cotton Aphids in Turkestan, II. 312.
Coccinella punctata, predaceous on Aphids in Russia, III. 206.
Coccinella quatuordecimpunctata, predaceous on Aphids in Russia, II. 79, III. 308.
Coccinella quinquepunctata, in Germany, II. 168; in swarms in Italy, II. 494; predaceous on Aphids in Russia, III. 220; predaceous on *Aphis avenae* in U.S.A., II. 697.
Coccinella repanda, in bait-traps for *Ceratitis capitata*, III. 568.
Coccinella sanguinea, predaceous on *Blissus leucoptera* in U.S.A., II. 227; predaceous on *Carolinaia cyperi* in U.S.A., III. 407.
Coccinella septempunctata, in swarms in Asia Minor, I. 549, II. 168; predaceous on vine moths in France, I. 524; predaceous on *Eriophyes ribis* in Germany, II. 297; predaceous on *Psylla isitis* in India, I. 45; in swarms in Italy, II. 493; parasitised by *Aphiochaeta fasciata* in Italy, II. 150; parasites of, in Russia, I. 457, 458; predaceous on Aphids in Russia, I. 457, II. 43, 312, 358, 514, 720, III. 211, 220, 308, 481, 704.
Coccinella transversoguttata, predaceous on Aphids in U.S.A., I. 511, III. 132.
Coccinella trifasciata, predaceous on Aphids in U.S.A., III. 132, 760.
Coccinella (*Adalia*) *undecimpunctata* in Italy, II. 494; predaceous on Aphids in Russia, III. 220.
Coccinella (*Adonia*) *variegata*, parasitised by *Aphiochaeta fasciata* in Italy, II. 150; predaceous on Aphids in Russia, II. 312, 358, III. 220; parasitised by *Dinocampus terminatus* in Russia, I. 457.
coccinellae, Tetrastichus.
coccineus, Aspidiotus (see *Chrysomphalus aurantii*); *Chermes* (see *C. pectinatae*).
Coccobacillus acridiorum, ineffective against locusts and grasshoppers in S. Africa, I. 197, III. 503; against *Zonocerus elegans* in S. Africa, I. 197; experiments with, against locusts in Algeria, II. 238,

462, 681, III. 118; against locusts in Argentina, I. 162, II. 461; experiments with, on locusts and grasshoppers in Canada, III. 63, 553; ineffective against locusts in Italy, II. 335; experiments with, in Madascar, III. 293; experiments with, against locusts in the Philippines, II. 126, III. 682; infesting *Polychrosis botrana* in Russia, III. 211; experiments with, on locusts in Russia, II. 353, 509, III. 339, 399, 699; ineffective against locusts in the Sudan, II. 95; against locusts in Yucatan, I. 162; in cockchafers, I. 306; silkworms immune to, I. 306, 307, 337.

Coccobacillus cajae, infesting *Arctia caja* and other insects in France, I. 167, 250, 336.

Coccobacillus lymantriae, infesting *Lymantria dispar* in France, II. 336, 422.

Coccobius scutellaris (see *Aphelinus*).

Coccoloba uvifera (Sea Grape), *Myrmelachista ambigua ramulorum* on, in U.S.A., I. 389.

Coccomytilus dispar (see *Lepidosaphes*).

Coccophagus, parasite of *Coccus viridis* in India, III. 146.

Coccophagus britannicus, sp. n., in Britain, III. 675.

Coccophagus eleaphilus, sp. n., parasite of *Philippia chrysophyllae* in Eritrea, III. 433.

Coccophagus flavoscutellum, parasite of *Coccus citricola* in California, III. 457.

Coccophagus immaculatus, parasite of *Aspidiotus perniciosus* in U.S.A., III. 473.

Coccophagus lecanii, parasite of scale-insects in California, I. 309, 310, III. 85, 457; imported into Hawaii, III. 757.

Coccophagus lunulatus, parasite of scale-insects in California, I. 310, III. 457.

Coccophagus niger, parasite of *Lepidosaphes ulmi*, in Britain, III. 675.

Coccophagus orientalis, parasite of *Saissetia oleae* imported into California, III. 121, 738; parasite of *Coccus viridis* in Ceylon, III. 647; imported into Hawaii, III. 757.

Coccophagus orientalis var. *modestus*, n., parasite of *Saissetia* (*Lecanium*) *nigra* in Dahomey, III. 433.

Coccophagus princeps, sp. n., in Eritrea, III. 433.

Coccophagus scutellaris, parasite of *Eulecanium robiniarum* in Russia, III. 542.

coccophila, Sphaerostilbe.

Coccotrypes cardamomi, in cardamoms in Ceylon, I. 351.

Coccotrypes dactyliperda, I. 351; in dates in Egypt, II. 506.

Coccotrypes eggersi, in ivory nuts in Ecuador, I. 351.

Coccotrypes graniceps, in cacao in Japan and the Philippines, I. 350.

Coccotrypes integer, in ebony in Ceylon, I. 351.

Coccotrypes pygmaeus, in *Hyphaene guineensis* in Kamerun, I. 351.

Coccus, on *Inga* in Porto Rico, III. 517; intercepted on citrus in U.S.A., III. 420.

Coccus (*Lecanium*) *africanus*, on coffee in E. Africa and Uganda, II. 58, 570, 591, III. 752.

Coccus (*Lecanium*) *caudatus*, on *Funtumia elastica* in Ceylon, II. 192.

Coccus citricola, sp. n., bionomics of, on citrus in California, II. 585, III. 85, 457, 622, 688, 690.

Coccus confusus indicus (see *Dactylopius*).

Coccus elongatus, II. 585; on laurel in Italy, III. 124.

Coccus hesperidum (Soft Scale), I. 383; on coffee in E. Africa, I. 415, II. 570; on oranges in Algeria, II. 230; on oleander in Arizona, I. 180; on oranges in Australia, III. 653; on *Pluchea odorata* and *Sterculia fulgens* in Barbados, II. 533; on figs in Britain, III. 675; declared a pest in Br. Columbia, I. 48; on coffee and citrus in Br. Guiana, II. 417, 569; bionomics of, on citrus in California, I. 309, III. 622; on citrus in Ceylon, III. 157; intercepted on bay trees in Hawaii, III. 170, 548; on oranges in Paraguay, III. 705; parasites of, in Peru, III. 135; on citrus in Rhodesia, II. 596; on *Cassia* and water hyacinth in the Seychelles, I. 129, 474, II. 269, 567; intercepted on *Laurus nobilis*, etc., in U.S.A., II. 186, III. 117, 354, 469, 513, 558, 626; on citrus in S. Europe, I. 278.

Coccus indicus (see *Dactylopius*).

Coccus lauri (see *C. hesperidum*).

Coccus litseae, sp. n., on *Litsea longifolia* in Ceylon, III. 755.

Coccus longulus, II. 585; on *Anona reticulata* in Australia, III. 653; on *Anona* in the Seychelles, I. 474; ants associated with, in the Seychelles, II. 567; intercepted on betel, etc., in U.S.A., III. 420, 494, 558, 625, 690, 739; on orange trees in U.S.A., I. 383.

Coccus mangiferae, on mango in Br. Guiana, II. **417**; infested with *Cephalosporium* in the West Indies, I. **83**, II. **88**.
Coccus persicae (see *Eulecanium*).
Coccus quercicola (see *Asterolecanium*)
Coccus ulmi (see *Gossyparia spuria*).
Coccus viridis (Green Scale), on coffee and citrus in E. Africa and Uganda, I. **107**, **247**, **415**, II. **58**, **283**, **429**, **447**, **570**, **591**, III. **752**; control of, on coffee and rubber in Ceylon, II. **191**, **192**, **644**, **649**, **652**, III. **146**, **157**, **174**, **755**; bionomics of, on coffee in India, II. **578**, III. **146**, **345**; bionomics of, in Java, III. **316–318**, **648**, **663**; in Mauritius, II. **612**; on coffee, rubber, etc., in the Seychelles, I. **76**, **129**, **474**, II. **566**; on citrus in West Indies, I. **83**, **251**, **329**, II. **87**, **143**; infested with *Cephalosporium*, II. **143**, **566**.
coccus, Dactylopius.
Cochin-China, *Cylas formicarius* in, I. **217**.
Cochineal, production of, in Southern Mexico, I. **81**.
Cochineal Insect (see *Dactylopius coccus*).
Cochlearia, Phaedon cochleariae on, in Sweden, III. **346**.
Cochlearia armoracia (see Horseradish).
cochleariae, Phaedon.
cockaynei, Pseudococcus.
Cockchafer, I. **217**, **239**, **250**, **306**, II. **148**, **422**, **542**, **563**, **640**, III. **435**, **612**; (see *Melolontha* and *Polyphylla*).
cockerelli, Dicraneura; *Eriococcus*; *Kermes*; *Lecaniobius*.
Cocklebur (see *Xanthium spinosum*).
Cockroaches, I. **62**, II. **14**, **72**, **653**, III. **330**, **376**, **443**, **568**; (see *Periplaneta* and *Phyllodromia*).
Cocksfoot Grass (see *Dactylis glomerata*).
coclesalis, Pyrausta.
Coco Yam (see *Colocasia*).
Cocoa (see Cacao).
Coco-de-mer (*Lodoicea sechellarum*), seldom attacked by rhinoceros beetle in Seychelles, II. **568**.
cocois, Aleurodicus (*Aleurodes*).
Coconut (*Cocos nucifera*), pests of, in E. Africa, I. **392**, **393**, **414**, **415**, II. **283**, **429**, **445**, **557**, III. **32**; legislation against, in E. Africa, III. **410**; pests of, in Australia, II. **689**, III. **27**, **167**; pests of, in the Belgian Congo, II. **422**, III. **649**; pests of, in Brazil, III. **695**; pests of, in Br. Guiana, I. **57**, **139**, II. **57**, **417**, **569**, III. **591**, **652**; legislation against pests of, in Br. Guiana, III. **175**; Coccids infesting, in California, II. **436**; pests of, in Ceylon, II. **643**, **644**, **654**, III. **62**, **83**; pests of, in the Far East, II. **490**; pests of, in Malay States, I. **158**, **159**, **217**, **273**, II. **7**, **99**, **111**, **134**, **323**, **422**, **480**, **583**, III. **12**, **323**, **467**, **724**; pests of, in Fiji, II. **133**, **150**, **690**, III. **27**; pests of, in German colonies, II. **417**; pests of, in the Gold Coast, II. **142**, **671**, III. **528**; *Hemichionaspis minor* imported into Hawaii on, III. **492**; pests of, in Java, III. **311**, **315**, **713**; pests of, in Madagascar, I. **424**, **425**; pests of, in Nigeria, II. **108**; pests of, in the Philippines, I. **118**, **311**, **314**; *Aspidiotus destructor* on, in Réunion, II. **216**; pests of, in the Seychelles, I. **129**, **424**, **474**, II. **566–568**, III. **627**; pests of, in the South Sea Islands, II. **2**, **7**, **26**, **270**, III. **27**, **316**, **411**, **739**, **744**, **754**; pests of, imported into U.S.A., III. **455**, **495**, **558**, **625**, **690**, **739**; pests of, in the West Indies, I. **263**, **285**, **329**, II. **87**, **143**, **460**, **646**, III. **14**, **650**, **679**; pests of, in Zanzibar, I. **235**, III. **124**; pests and diseases of, II. **689–691**; termites on, I. **355**, II. **139**, **268**.
Coconut Beetle (see *Oryctes*).
Coconut Butterfly (see *Brassolis sophorae*).
Coconut Hispid (see *Promecotheca* spp.).
Coconut Mealy Bug (see *Pseudococcus nipae*).
Coconut Oil, relative attractiveness of, to *Ceratitis capitata*, III. **28**.
Coconut Scale (see *Aspidiotus destructor*).
Coconut Skipper (see *Hidari irava*).
Coconut Snow Scale (see *Diaspis boisduvali*).
Coconut Weevil (see *Rhynchophorus*).
Coconut Whitefly (see *Aleurodicus cocois*).
cocophaga, Graeffea.
Cocos, Fiorinia fioriniae on, in Peru, III. **135**.
Cocos nucifera (see Coconut).
Cocos plumosa, Oryctes rhinoceros on, in Straits Settlements, II. **99**.
Cocos romanzoffiana, pests of, in Brazil, III. **695**.
Codiaeum (Ornamental Croton), *Duomitus punctifer* on, in Barbados, II. **533**, III. **73**.
Codling Moth (see *Cydia pomonella*).

Codophila varia, on mustard in Astrachan, II. **355**, III. **220**.
coeca, Phrystola.
Coeliodes fuliginosus, on poppy and cotton seed in Russia, I. **539**, II. **198**, III. **640**.
Coeliodes inequalis, on vines in Italy, III. **112**.
Coelophora inequalis, introduced into Hawaii, against Aphids, III. **757**.
Coelosterna, in India, III. **706**.
Coelosternus rugicollis, on rubber in Brazil, II. **194**.
Coenopaeus palmeri, recommended to be introduced into Queensland against prickly pear, III. **126**.
coerulans, Sphingonotus (*Oedipoda*).
coerulea, Zicrona.
coeruleipennis, Promecotheca.
coeruleocephala, Episema (*Diloba*).
coerulescens, Oedipoda.
coeruleus, Corynetes ; *Rhynchites.*
Coffea arabica, I. **22**, II. **241**, **275**, **429**, **435**, III. **135**, **412**, **751**; (see Coffee).
Coffea bukowensis, Stephanoderes aulmanni on, in E. Africa, I. **351**.
Coffea liberica, II. **425**.
Coffea robusta, I. **5**, **89**, **122**, II. **275**, **425**, III. **83**, **314**, **648**, **751**; (see Coffee).
coffeae, Aphis ; *Asterolecanium* ; *Aulacophora* ; *Oscinella* ; *Stephanoderes* ; *Xyleborus* ; *Zeuzera.*
coffearia, Homona (*Capua*).
Coffee, Orthopterous pests of, in Africa, II. **575**; pests of, in E. Africa, I. **22**, **104**, **106**, **107**, **246**, **247**, **351**, **414**, **415**, II. **197**, **283**, **429**, **446**, **447**, **570**; pests of, in the Belgian Congo, I. **22**, III. **649**; pests of, in Brazil, II. **205**; pests of, in Br. Guiana, I. **343**, II. **417**, **569**, III. **591**; pests of, in California, II. **435**; *Howardia biclavis* intercepted on, in California, III. **626**; pests of, in Ceylon, I. **89**, II. **151**, **323**, **644**, **654**, III. **83**, **146**, **725**, **755**; pests of, in Colombia, II. **708**; pests of, in the Far East, I. **122**, II. **490**; pests of, in Malay States, I. **122**, **501**; pests of, in the Gold Coast, II. **671**, **672**, III. **168**; *Ceratitis capitata* on, in Hawaii, I. **374**, III. **412**; pests of, in India, II. **139**, **151**, **578**, III. **146**, **345**; pests of, in Java, I. **5**, **122**, **351**, II. **241**, **267**, **535**, III. **3**, **312**, **313**, **314**, **317**, **589**, **645–648**, **662**, **663**, **713**; *Lachnodius greeni* on, in Madagascar, II. **425**; pests of, in Nigeria, II. **108**, III. **166**; pests of, in Nyasaland, II. **277**, **278**; *Pseudococcus citri* on, in Peru, III. **135**; pests of, in Réunion, II. **215**, **216**; pests of, in Samoa, II. **267**; pests of, in the Seychelles, I. **76**, **129**, **474**, II. **566**; pests of, in Uganda, I. **48**, **49**, II. **58**, **59**, **241**, **273**, **275**, **276**, **447**, **591**, III. **289**, **751**; legislation against importation of, into Uganda, I. **349**, II. **273**; pests of, in the West Indies, I. **389**, II. **50**, **602**, III. **517**; *Stephanoderes coffeae* in, II. **240**; distribution of bark-beetles infesting I. **351**; handbook of diseases and pests of, I. **548**, II. **316**.
Coffee Bean Borer (see *Stephanoderes coffeae*).
Coffee Borer, Red (see *Zeuzera coffeae*).
Coffee Borer, White (see *Anthores leuconotus*).
Coffee Borer, Yellow-headed (see *Dirphya princeps*).
Coffee Bug (see *Antestia variegata*).
Coffee Leaf-miner (see *Leucoptera coffeella*).
Coffee-tree, not attacked by *Lymantria dispar* in U.S.A., III. **339**.
Coffee Weed (see *Cassia*).
coffeella, Leucoptera (*Cemiostoma*).
cogitans, Eupristocerus.
cognata, Acidia (*Trypeta*) ; *Aelia.*
cognatellus, Hyponomeuta.
cognatus, Poeciloscytus ; *Prosopothrips* ; *Xyleborus.*
Cola (see Kola).
Cola cordifolia, in the French Sudan, II. **631**.
colaca, Parnara.
colae, Ceratitis.
Colaphus hoefti, on mustard in Russia, III. **47**, **637**.
Colaphus (*Colaspidema*) *sophiae*, bionomics of, on cruciferous crops in Russia, I. **536**, **537**, II. **355**, III. **221**, **399**, **637**.
Colaptes auratus, destroying insects in Ottawa, II. **307**.
Colaspidema atrum, on lucerne in Europe, I. **527**; on lucerne, etc., in France, I. **226**, II. **58**, **203**, **420**, **577**, III. **616**; on clover in Italy, II. **695**.
Colaspidema hoefti (see *Colaphus*).
Colaspidema sophiae (see *Colaphus*).
Colaspis fastidiosa, in St. Vincent, III. **411**.
Colasposoma compactum, on sisal in E. Africa, I. **414**.
Cole Titmouse, destroying *Tortrix murinana* in Germany, II. **148**.
colemani, Bruchobius.
Colemania sphenariodes (Deccan Grasshopper), control of, in India, I. **509**, II. **138**, III. **174**.

Coleophora, in orchards in Russia, II. 700, III. 397, 437.
Coleophora anatipennella, in the Crimea, III. 613.
Coleophora fabriciella, in orchards in Turkestan, II. 635, 636.
Coleophora fletcherella (Cigar Casebearer), in orchards in Canada and U.S.A., I. 290, 404, II. 677, III. 68.
Coleophora gryphipennella, on roses, etc., in Russia, II. 720, III. 613.
Coleophora hemerobiella, on pears in Holland, III. 741; in orchards in Russia, II. 44, III. 220, 224, 393, 610.
Coleophora laricella (Larch Casebearer), on Conifers in Britain, I. 119, 463; on Conifers in Canada, I. 407, III. 43, 585; parasites of, in Europe, I. 63; in Germany, II. 501; destroyed by birds in Germany, II. 148; on larches in Holland, III. 741; lime-sulphur spray against, in Norway, III. 191; on larch in Russia, III. 223.
Coleophora leucochrysella, Braconid parasites of, in U.S.A., III. 658.
Coleophora limosipenella, on elms in New Jersey, III. 589.
Coleophora lutipennella, on oaks in England, II. 619.
Coleophora malivorella, in Ontario, I. 404; on apples in U.S.A., I. 290.
Coleophora medicaginis, on lucerne in Europe, I. 527.
Coleophora sacramenta, sp. n., on plums in California, III. 77.
coleophorae, Bassus; *Microbracon*.
coleoptratorum, Parasitus.
Coleus, Prodenia litura on, in the Philippines, I. 482; *Orthezia insignis* on, in U.S.A., II. 429, III. 709.
Colias, natural enemies of, in France, II. 577; parasitised by *Habrobracon plotnikovi* in Russia, II. 424; *Orithezia insignis* on, in U.S.A., III. 709.
Colias edusa, on lucerne in Europe, I. 527; bionomics of, in France, II. 577, 578.
Colias electra (Lucerne Caterpillar), on lucerne in S. Africa, I. 146, II. 130.
Colias eurytheme (Alfalfa Butterfly), bionomics of, on lucerne in U.S.A. I. 180, II. 245, 663, III. 151, 153.
Colias hyale, on lucerne in Europe, I. 527; bionomics of, in France, II. 577.
colibri, Athalia.
Colinus virginianus (Virginian Quail) destroying noxious insects in U.S.A., I. 431, II. 525.
Colius, destroying *Pseudococcus filamentosus* in E. Africa, II. 147.
Collared Wireworm (see *Cebrio bicolor*).
collaris, Amicroplus; *Chrysopa*; *Exosoma*; *Macrocentrus*; *Neomegastigmus*; *Oides*; *Oxycarenus*; *Philotrypesis*; *Profenusa*; *Rhopalophora*; *Sessinia*.
Collembola, on *Trifolium pratense* and pines in England, I. 242, 333.
Collinsia bicolor, Exomias pellucidus on, in England, III. 288, 564.
Collops vittatus, destroying *Colias eurytheme* in U.S.A., III. 153.
Collyria calcitrator, parasite of *Cephus pygmaeus*, etc., in Russia, III. 237, 480.
Colobopyga magnani, on *Chamaerops humilis* in Buenos Aires, I. 162.
Colocasia (Coco Yam), not attacked by *Helopeltis* in the Gold Coast, II. 671.
Colombia, coffee pests in, II. 708; destruction of locusts in, III. 704; scale insects imported from, into U.S.A., III. 455; *Tomaspis bogotensis* in, II. 286.
colon, Chiropachis; *Paracalocoris*.
Colopha ulmicola, on *Ulmus americana* and *Eragrostis* in Colorado, III. 351.
coloradensis, Chermes; *Eriopeltis*; *Phidippus*.
Colorado, Aphids in, I. 26, 77, II. 343, 634, III. 16, 350; *Cacoecia argyrospila* in, I. 225, 226, 425, 510, II. 14; natural enemies of *Eriosoma lanigerum* in, I. 26; pests of horse-radish in, I. 177; pests of sunflowers in, III. 753; miscellaneous pests in, I. 40, 148, 324, 352, II. 115, 280, III. 90, 266, 407.
Colorado Potato Beetle (see *Leptinotarsa decemlineata*).
Colpognathus celerator, parasite of *Pennisetia* (*Bembecia*) *hylaeiformis* in France, II. 622.
colpophorus, Bracon.
Coltsfoot, *Aphis pyri* on, II. 406.
columba, Tremex.
Colutea, probably not a food-plant of *Acyrthosiphon pisi* in Russia, III. 704.
Colutea arborescens (Bladder Senna), *Lampides baetica* on, I. 411.
Colza Oil, attractiveness of, to *Ceratitis capitata*, III. 28.
comalis, Godara (see *Crocidolomia binotalis*).
comatus, Phobetus.

Combretum porphyrolepis (Leadwood), not attacked by termites in Rhodesia, I. **465.**
combusta, Dinara (*Anticyra*).
comes, Cryptacrus ; *Typhlocyba.*
comitator, Ichneumon.
comma, Diaprepes abbreviatus.
Common Boll Worm (see *Chloridea obsoleta*).
Common Mealy Bug (see *Pseudococcus citri*).
communis, Melanotus ; *Meteorus* ; *Ravinia.*
comosa, Apogonia.
comosipennis, Oligosita.
compacta mercki, Hyperaspis.
compactum, Colasposoma.
compactus, Pyrilloxenos ; *Xyleborus.*
complana, Harpagoneura.
complanella, Tischeria (*Gracilaria*).
complexa, Harpagoneura.
compositae, Aphis.
compressicornis, Chrysophagus.
compressus, Adoretus ; *Camponotus*; *Janus.*
Compsilura concinnata, parasite of *Episema coeruleocephala* in Russia, III. **639** ; parasite of gipsy moth and other Lepidoptera in U.S.A., I. **270, 402,** II. **103, 136, 187, 295, 343, 394, 528, 710, 711,** III. **42, 63, 138, 251, 329, 330, 507.**
Compsilura oppugnator, parasite of *Cirphis latiuscula* in Porto Rico, II. **496,** III. **134.**
compsivorus, Tetrastichus.
Compsus auricephalus, parasitised by *Tetrastichus compsivorus* in U.S.A., III. **249.**
comptana, Ancylis (*Phoxopteris*).
comstocki, Caliephialtes (see *C. messor*) ; *Phorocera.*
Comys fusca, parasite of scale-insects in California, II. **599,** III. **150.**
concavus, Lixus.
conchiformis, Mytilaspis (see *Lepidosaphes ulmi*).
conchylalis, Caprinia.
Conchylis ambiguella (see *Clysia*).
Conchylis badiana (see *Phalonia*).
Conchylis epilinana (see *Phalonia*).
Conchylis rubigana (see *Phalonia*).
Conchyloctenia punctata var. *parummaculata*, on sweet potatoes in Uganda, I. **49.**
concinna, Chactocnema ; *Oedemasia*; *Schizura.*
concinnata, Compsilura.
concolor, Suana.
conducta, Euplexia.
confertus, Polycaon.
configuratus, Deltocephalus.
conformis, Anthomyia (see *Pegomyia hyoscyami*).
confusa, Phytometra (*Plusia*) ; *Tephritis* (see *T. cincta*).
Confused Flour Beetle (see *Tribolium confusum*).
Confused Wireworm (see *Limonius confusus*).
confusorius, Ichneumon.
confusum, Tribolium.
confusus, Aspidiotus , *Dactylopius* (*Coccus*) ; *Limonius* ; *Odontopus* ; *Xyleborus* (*Ips*).
congestus, Apanteles.
conglobata, Coccinella (*Harmonia*).
Congo, Belgian, *Apate monacha* in, II. **196** ; search for parasites of *Ceratitis capitata* in, II. **316** ; *Ceratitis stictica* from, I. **91, 97** ; *Dacus inornatus* from, III. **748** ; bionomics of *Papilio demodocus* in, III. **650** ; indigenous silkworms of, II. **547** ; termites from, II. **610** ; *Zonocerus* spp. in, II, **575** ; bee culture in. I. **26, 27** ; cacao pests in, II. **634,** III. **663** ; pests of coconuts in, II. **422** ; pests of coffee in, I. **351,** II. **241,** III. **649** ; pests of rubber in, I. **351,** II. **414,** III. **648.**
congonus, Cryphalus ; *Stephanoderes.*
congregatus, Apanteles.
conicola, Paratimia.
conicus, Rhynchites (see *R. coeruleus*).
conifer, Diacantha.
Coniocleonus glaucus var. *turbatus*, in trap-trenches in Russia, II. **482.**
Coniocleonus nigrosuturatus, in Bessarabia, II. **465.**
Coniontis, on sugar-beet in California, II. **303.**
Coniontis subpubescens, on beans in California, I. **417.**
Coniopteryx, attacking *Paratetranychus ununguis* in Sweden, III. **253.**
Conium maculatum, Hyadaphis xylostei on, in California, II. **251.**
conjuncta, Parnara.
conjugella, Argyresthia.
conjugens, Corymbites.
Connecticut, control of *Lymantria dispar* in, III. **43,369** ; miscellaneous pests in, I. **53, 100, 181, 201, 381,** II. **121, 183, 184, 188, 196, 253, 393, 394, 625,** III. **57, 113, 369, 370, 371, 372** ; legislation against contagious diseases among bees in, II. **186.**
Conoblasta fumiferanae, parasite of *Tortrix fumiferana* in U.S.A., I. **202.**
Conocephaloides maxillosus, on rice and sugar-cane in Br. Guiana, I. **522,** II. **568.**

Conocephalus ensiger, on fruit in U.S.A., III. **181.**
Conocephalus nitidulus, on rice in E. Africa, I. **413.**
Conophthorus lambertianae (Sugar-pine Cone Beetle), bionomics of, on pines in U.S.A., III. **667.**
Conophthorus ponderosae (Western Yellow Pine Cone Beetle), bionomics of, on pines in U.S.A., III. **667.**
Conorrhinus sanguisugus, in Arizona, I. **179.**
Conorrhynchus luigionii, in Russia, II. **465.**
Conorrhynchus (*Cleonus*) *mendicus*, bionomics of, on beet in France, II. **89, 420, 451**; in Russia, II. **465**; *Coccobacillus* infections in, I. **336**, II. **451.**
Conorrhynchus nigrivittis var. *kindermanni*, in Russia, II. **465.**
Conotrachelus, imported into U.S.A. on avocado seeds from Guatemala, III. **455.**
Conotrachelus crataegi, in Missouri, I. **283.**
Conotrachelus juglandis, on walnuts in Connecticut, I. **52, 69, 181.**
Conotrachelus nenuphar (Plum Curculio), bionomics and control of, on fruit trees in Canada, I. **404**, II. **432, 492**, III. **137, 358, 408, 552**; bionomics and control of, in U.S.A., I. **282, 290, 451, 467, 475**, II. **190, 359, 458, 464**, III. **179, 180, 193, 414, 472, 473, 529**; destroyed by thrushes in U.S.A., II. **585.**
conquisitor, *Pimpla* (*Itoplectis*).
conradti, *Ceroplesis.*
consobrina, *Cotalpa*; *Phyllotreta.*
consobrinus, *Nematus* (see *Pteronus leucotrochus*).
consolidatus, *Chermes.*
consorta, *Amatissa.*
conspersus, *Gryllus.*
conspicua, *Euxoa.*
constricta, *Arthrocnodax*; *Malacosoma.*
contaminata, *Oxygrapha* (*Teras*).
Contarinia, on wheat in Russia, III. **480.**
Contarinia (*Diplosis*) *acarivora*, destroying *Pseudococcus bicaudatus* in Java, III. **648.**
Contarinia aurantiaca (see *Sitodiplosis mosellana*).
Contarinia ballotae, on oats in France, III. **428.**
Contarinia (*Cecidomyia*) *corylina*, on *Corylus* in Russia, II. **672.**
Contarinia gossypii (Flower-bud Maggot), on cotton in the West Indies, I. **258, 263, 329**, II. **87.**
Contarinia johnsoni, on grapes in U.S.A., III. **545.**
Contarinia (*Cecidomyia*) *loti*, on *Lotus corniculatus* in Denmark, III. **247, 699.**
Contarinia medicaginis, on lucerne in Europe, I. **527.**
Contarinia nasturtii (Swede Midge), bionomics of, in Britain, III. **500.**
Contarinia nigra, on pears in France, I. **204.**
Contarinia onobrychidis, on sainfoin in Russia, II. **524.**
Contarinia pastinacae, on parsnips in France, I. **505.**
Contarinia (*Cecidomyia*) *pisi*, on leguminous plants in Denmark, III. **246.**
Contarinia (*Diplosis*) *pyrivora* (Pear Midge), control of, in Britain, III. **676, 715**; on pears in France, I. **204, 481**; on pears in Italy, III. **124**; on pears in Norway, III. **108**; on pears in U.S.A., I. **467**, II. **183**, III. **550**; bionomics and distribution of, II. **183.**
Contarinia (*Diplosis*) *sorghicola*, bionomics of, in U.S.A., I. **327**, III. **451.**
Contarinia torquens, on cabbage in Holland, III. **200.**
Contarinia (*Cecidomyia*, *Diplosis*) *tritici*, in Denmark, III. **246, 698**; in Holland, III. **199**; in Nova Scotia, III, **69**; on grain in Russia, II. **172.**
contemptus, *Phyllobius.*
conterminana, *Eucosma.*
contexta, *Pulvinaria*; *Tephrina.*
conticelli, *Stenaphis.*
contortulus, *Gonatopus.*
contortus typographi, *Tylenchus.*
contractor, *Cecidomyia.*
Conventzia hageni, destroying red-spider in California, I. **143.**
convergens, *Hippodamia.*
convexus, *Lecaniodiaspis.*
convolutella, *Zophodia* (*Phycis*).
convolvuli, *Herse* (*Protoparce*).
Convolvulus, *Bryobia* on, in Egypt, II. **505**; *Nupserha apicalis* on, on, in Natal, III. **61**; insects on, in Russia, II. **312**; III. **536, 640.**
Convolvulus arvensis, II. **212**; *Phlyctaenodes sticticalis* on, in Russia, I. **360.**
cookei, *Hoplocampa.*
Cook Islands, *Graeffea cocophaga* on coconuts in, II. **691.**
cooleyi, *Pseudokermes.*
Coon Bug (see *Oxycarenus lectularis*).

Cooper's Dip, I. 422, 465, II. 230, III. 124, 250.
Copaifera mopani (Mopani Tree), resistant to termites in Rhodesia, I. 465, III. 379.
Copernicia cerifera, *Bruchus obtectus* imported into E. Africa on, from Brazil, I. 247.
Copestylum marginatum, in cactus in U.S.A., I. 82.
Copidosoma truncatellum (see *Litomastix*).
Copper, action of, on plants, II. 486, 618, III. 60; chemistry and preparation of sprays and dusting powders containing, I. 237, II. 550, 553, 587, III. 283, 292, 495, 519, 614; percentage of, in Bordeaux mixture, II. 71, 546, 550, 647, 648, III. 30, 292; in sprays, methods of increasing adhesive properties of, I. 46, 548, II. 556, 681; in sprays against vine pests, I. 231, 337, 338, 356, II. 166, 194, 239, 240, 446, 486, 537, 553, 686, III. 427, 562; (see also Bordeaux Mixture).
Copper Acetate, against vine pests, II. 686; advantages of, III. 60; chemistry of, in sprays, II. 587; manufacture of, with wine lees, III. 739.
Copper Aceto-arsenite, preparation of, III. 325 (see Paris Green).
Copper Arsenate, against *Cydia pomonella*, II. 162; against *Bothynoderes punctiventris*, II. 180; against *Haltica ampelophaga*, II. 446; against *Hyponomeuta malinellus*, II. 637; as an insecticide, III. 264.
Copper Arsenite (Scheele's Green), against *Deilephila lineata*, II. 608; against *Hyponomeuta malinellus*, II. 637; against *Malacosoma americana*, III. 325, 508; as an insecticide, III. 325, 649, 650; preparation of, II. 446.
Copper Borate, I. 286.
Copper Carbonate, Ammoniacal, as an insecticide, III. 301; and soap spray, formulae for, III. 513, 514.
Copper Lime spray, against grasshoppers, II. 209; cost of, II. 412.
Copper Oxide, percentage of, in Paris green, II. 546.
Copper Oxychloride, and lime, as an insecticide, III. 347, 429.
Copper Sulphate, against orchard pests, I. 315, II. 291, III. 513; against potato pests, I. 301, 377, II. 173, 705; against termites, I. 465; against *Blaniulus guttulatus*, II. 656; against *Dacus oleae*, II. 289, 479; in petroleum emulsion against *Nysius senecionis*, II. 556; and nicotine against vine pests, II. 239, 528; as a preservative for cactus solution, III. 296; tests for adulteration of, III. 589; as an insecticide, II. 209; and lime, reactions between, III. 30; mixed with lime-sulphur, I. 456, II. 543.
Copper Sulphide, of no value as an insecticide, II. 543.
Copperas, Green, against *Psylla mali*, I. 209, II. 35; against scale-insects, II. 35.
Copra, *Necrobia rufipes* on, in the Philippines, II; 691 (see Coconut).
Coprosoma, *Poliaspis argentosus* on, in New Zealand, III. 721.
Coprosoma lucida, *Chrysomphalus aurantii* on, in S. Australia, II. 584.
Coptocycla signifera, on sweet potato in Porto Rico, III. 477.
Coptops aedificator, on coffee in E. Africa, I. 414.
Coptosoma siamica, on camphor in Ceylon, II. 597.
Coptotermes amanii, in timber in E. Africa, I. 414.
Coptotermes ceylonicus, in Ceylon, I. 89.
Coptotermes formosanus, in buildings in Formosa, II. 190.
Coptotermes gestroi, bionomics and control of, in the East Indies, I. 355, II. 133, 415, III. 504, 713.
Coptotermes heimi, in timber in Bombay, I. 525.
Coptotermes marabitanos, on *Hevea brasiliensis* in Brazil, II. 193.
Coptotermes parvulus, in timber in Bombay, I. 525.
Coquillettina plankii, sp. n., parasite of grasshoppers in New Jersey, III. 690.
Coracias garrula destroying bark-beetles, II. 147, 222.
coracina, *Harrisina*.
Coraebus fasciatus, on osiers in Germany, II. 643.
Coraebus undatus, on cork oak in Spain, II. 165.
Coral Tree (see *Erythrina indica*).
coralinus, *Aspidiotus*.
corallinus, *Alurnus*.
Corchorus (see Jute).
Corchorus capsularis, *Prodenia litura* on, in the Philippines, I. 482.
Corchorus olitorius, *Prodenia litura* on, in the Philippines, I. 482.
Corcyra cephalonica, damaging biscuits, I. 292, 294; parasitised by *Hockeria* sp. in Hawaii, III. 681.

Cordia interrupta, Phytalus smithi on, in Mauritius, I. 29.
Cordyceps, infesting *Lygaeonematus erichsoni* in England, II. 55; infesting *Diatraea* spp. in Br. Guiana, I. 521.
Cordyceps barberi, infesting *Diatraea saccharalis* in Porto Rico, I. 184, II. 48, III. 674.
Cordyceps clavulata, III. 665.
Cordyceps militaris, infesting *Dasychira pudibunda* in Holland, III. 196; infesting *Dendrolimus pini* in Russia, II. 222; negative experiments with, III. 135.
Cordyline, Leucaspis cordylinidis on, in Australia, III. 80.
Cordyline australis (Cabbage Tree), *Venusia verriculata* on, in New Zealand, III. 721.
Cordyline banksii, Venusia verriculata on, in New Zealand, III. 721.
cordylinidis, Leucaspis.
Cordylomera suturalis, imported into England in timber, from West Africa, I. 125.
Coreus (*Coriomeris*) *denticulatus*, on hay in Russia, III. 479.
coriaceus, Homalonotus; *Procrustes.*
coriarius, Prionus.
Corigetus bidentulus, on tea in Assam, III. 444.
Coriomeris denticulatus (see *Coreus*).
Coriscus ferus (see *Nabis*).
Coriscus inscriptus (Soldier Bug), probably predaceous on *Phylloscelis atra* in U.S.A., II. 456.
Corizus (*Stictipleurus*) *crassicornis*, on lucerne in Russia, III. 45.
Corizus (*Rhopalus*) *parumpunctatus*, on lucerne in Russia, III. 45.
Cork-Oak (*Quercus suber*), *Zeuzera pyrina* on, in Algeria, I. 396, 397; *Lymantria dispar* on, in France, II. 422; pests of, in Portugal, I. 313, 314; pests of, in Sardinia, I. 221, 506; pests of, in Spain, II. 164.
Corn (see Maize or Wheat).
Corn Bill Bug (see *Sphenophorus callosus*).
Corn Bud Worm (see *Laphygma frugiperda*).
Corn Ear Worm (see *Chloridea obsoleta* and *Laphygma frugiperda*).
Corn Flea-beetle (see *Chaetocnema ectypa*).
Corn Ground Beetle (see *Zabrus tenebrioides*).
Corn Leaf-hopper (see *Peregrinus maidis*).
Corn-root Aphis (see *Aphis maidiradicis*).
Corn Silk Beetle (see *Luperodes varicornis*).
Corn-stalk Beetle (see *Ligyrus rugiceps*).
Corn Weevil (see *Calandra granaria* and *C. oryzae*).
Cornel, vine moths on, in France, I. 71.
Cornfield Ant (see *Lasius niger americanus*).
corni, Anoecia; *Eulecanium* (*Lecanium*).
Cornus, Argyresthia conjugella on, II. 419; not attacked by *Lymantria dispar* in U.S.A., III. 669; *Malacosoma disstria* on, in U.S.A., III. 87.
Cornus alba, Aulacaspis pentagona on, I. 222.
Cornus alternifolia (Dogwood), *Nezara hilaris* on, in Ohio, II. 704.
Cornus florida, Euclea indetermina on, in U.S.A., II. 94.
Cornus mas, food-plant of *Clysia ambiguella*, I. 7, III. 210.
Cornus sanguinea (Dogwood), *Pammene rhediella* on, II. 419; *Anoecia corni* on, in Russia, III. 45; vine moths on, in Russia, III. 210.
cornuta, Corydalis; *Epeira*; *Synagris*; *Trypeta.*
cornutus, Gnathocerus; *Passalus.*
coronata, Atta.
coronatus, Liparus.
Corone palmarum, on coconuts in Malay States, III. 323.
Coronilla vulgaris, Kakothrips robustus on, in Britain, III. 279.
Corrosive Sublimate, against ants, II. 224, III. 365; against cockroaches, I. 62; against *Cacoecia argyrospila*, II. 15; against *Chortophila brassicae*, III. 370; against *Odontopyge*, II. 592; against *Phthorimaea operculella*, III. 418; ineffective against *Plagiolepis* in Java, III. 663; against clothes moths and carpet beetles, III. 509, 559; for disinfecting cotton seed, II. 581; effect of, on insects, III. 691.
corrugans, Macrolabis.
corrugatans, Prociphilus.
corrupta, Epilachna.
Corsica, *Dacus oleae* in, I. 175, 420, II. 421.
Corsican Pine (*Pinus laricio*), *Polyphylla fullo* on, in Hungary, II. 309; not attacked by *Odontria puncticollis* in New Zealand, I. 194.
Corthylus punctatissimus, on fruit trees in New York, III. 474.
corticalis, Phylloxera; *Tenebroides.*
Corticaria crenulata, damaging bottle corks, I. 506.

corticea, Euxoa.
corvina, Anagyrella.
Corvus corone, destroying *Hylobius abietis*, II. 148.
Corvus frugilegus, destroying beetles and locusts in Russia, II. 179, III. 603.
Corydalis cornuta, parasitised by *Sarcophaga helicis*, III. 452.
corylana, Tortrix (*Pandemis*).
coryli, Apoderus; *Cryptocephalus*; *Eriophyes*; *Eulecanium* (*Physokermes*); *Strophosomus.*
corylina, Contarinia.
Corylus, not attacked by *Aspidiotus perniciosus*, I. 472; pests of, in Russia, II. 672, 673, III. 47.
Corylus avellana (see Hazel).
Corymbites aeneus, III. 299.
Corymbites aeripennis, in orchards in British Columbia, II. 676.
Corymbites caricinus, on fruit trees in U.S.A., III. 299..
Corymbites castaneus, III. 299..
Corymbites conjugens, in orchards in British Columbia, II. 676.
Corymbites cruciatus, in orchards in British Columbia, II. 676.
Corymbites cylindriformis, on lucerne and wheat in U.S.A., III. 299.
Corymbites fallax, in orchards in British Columbia, II. 676.
Corymbites furtivus, in orchards in British Columbia, II. 676.
Corymbites hieroglyphicus, on apple trees in British Columbia, I. 90.
Corymbites inflatus (Inflated Wireworm), in orchards in British Columbia, I. 90, 413, II. 676; in U.S.A., III. 299.
Corymbites latus, III. 299.
Corymbites maurus, in orchards in British Columbia, II. 676.
Corymbites morulus, in orchards in British Columbia, II, 676
Corymbites noxius (Dry-land Wireworm), in U.S.A., III. 299.
Corymbites pectinicornis, III. 299.
Corymbites siaelandicus, III. 299.
Corymbites tarsalis, on fruit trees in U.S.A., III. 298.
Corymbites triundulatus, in orchards in British Colombia, II. 676.
Coryna dorsalis, on cotton in Africa, II. 2.
Coryna hermanniae, on cotton in Africa, II. 2.
Corynetes coeruleus, destroying *Anobium striatum* in Sweden, II. 100, III. 256.
Corynothrips, on cassava in St. Vincent, III. 367.
Corynothrips stenopterus, on cassava in St. Vincent, II. 104, III. 411.
Corypha gebanga, Oryctes rhinoceros on, in Straits Settlements, II. 99.
Corypha umbraculifera (Talipot Palm), *Oryctes rhinoceros* on, in Straits Settlements, II. 99.
Corythaica monacha, on egg-plant in the West Indies, I. 76, III. 476.
Corythuca, on cassava in the West Indies, I. 258, III. 367.
Corythuca gossypii, food-plants of, in Porto Rico, III. 476.
Cosmia subtilis, bionomics of, in Russia, II. 635, 636, 637, 714.
Cosmia trapezina (see *Calymnia*).
Cosmocena citripes (see *Polynema longipes*).
Cosmocomoidea morrilli, on sugar-cane in Mexico, I. 184.
Cosmopepla carnifex, disseminating fire-blight in U.S.A., II. 288.
Cosmophila (see *Anomis*).
Cosmopolites sordidus (*Sphenophorus striatus*) (Banana Weevil), distribution of, II. 506; in Mauritius, II. 612; in the Seychelles, III. 410; imported into U.S.A. from Brazil, III. 455.
Cosmos sulphurea, Tarsonemus translucens on, in Ceylon, II. 151.
Cossus, I. 68.
Cossus cossus (Goat Moth), in forest trees in United Kingdom, I. 463, II. 498; bionomics of, in vines in France, II. 196; in Germany, II. 500; in oaks, etc., in Holland, I. 385, III. 198, 742; in poplars in Italy, III. 124; in forest trees in Norway, III. 696; in fruit trees, etc., in Russia, I. 460, II. 36, 265, 714, III. 46, 51, 183, 206, 220, 225, 389, 393, 398.
Cossus ligniperda (see *C. cossus*).
Costa Rica, apiculture in, I. 220; insect pests in, I. 20, 316, 321, 341, II. 92, 280; insect pests from, imported into U.S.A., II. 461, III. 354.
costalis, Eulimneria; *Harpactor*; *Hypsopygia.*
costana, Cacoecia (*Tortrix*).
costaricensis, Eutermes.
costatus, Xixuthrus.
costimacula, Eublemma.
Cotalpa consobrina, on cottonwood trees in Arizona, III. 513.
Cothonaspis (*Trybliographa*), parasite of *Chortophila brassicae* in Europe, III. 1; parasite of *Hylemyia antiqua* in Wisconsin, III. 569.
Cothonaspis rapae, parasite of *Chortophila brassicae* in Britain, III. 617, 627.
cothurnatus, Platylabus.

Cotoneaster, Aspidiotus perniciosus on, I. 472, *Eriophyes pyri* on, in America, III. 362; destruction of, against fruit pests in Britain, III. 676.
Cotoneaster vulgaris, Aphis pomi on, in Russia, II. 79; *Eriophyes pyri* on, in Scotland, II. 498.
Cotton (*Gossypium*), pests of, in Africa, I. 121, 246, 272, 349, 351, 414, 415, 545, 546, II. 1, 2, 106, 107, 108, 146, 277, 278, 283, 429, 571, 575, 579, 580, 591, 592, III. 124, 164, 168, 359, 752; pests of, in Argentina, II. 207, 462; pests of, in the Bismarck Archipelago, I. 349; pests of, in Br. Guiana, II. 417; pests of, in Ceylon, II. 644, III. 61, 157; pests of, in Egypt, I. 92, II. 105, 218, 319–321, 324, 325, 505, 507, 508, 596, III. 72, 167, 505, 752; pests of, in the Far East, I. 351, II. 490; not attacked by *Chloridea obsoleta* in Hawaii, II. 629; pests of, in India, I. 508, II. 139, 151, III. 144, 174, 345; pests of, in Peru, I. 157, 165, 172, 183, 316, 322–324, III. 135, 273; pests of, in Asiatic Russia, II. 73, 75, 198, 262, 311, 312, 314, 423, 649, 715, 716, III. 338, 702; pests of, in U.S.A., I. 49, 243, 264, 266, 351, 430, 517, II. 267, 392, 430, 435, 519, 649, 650, 663, 694, 704, III. 12, 25, 64, 299, 351, 424, 425, 447, 470, 471, 512, 513, 516, 545, 574, 590, 685, 693, 710, 724; *Gelechia gossypiella* imported into U.S.A. from India on, III. 454; pests of, in the West Indies, I. 198, 254, 258, 263, II. 87, 142, 143, 144, 191, 531, 533, 603, III. 5, 22, 73, 302, 411, 666; review of pests and diseases of, II. 316; legislation respecting, in U.S.A., II. 91, 92.
Cotton, Arizona Wild (see *Thurberia thespesioides*).
Cotton Aphis (see *Aphis gossypii*).
Cotton Boll Weevil (see *Anthonomus grandis*).
Cotton Boll Worm (see *Chloridea obsoleta*).
Cotton Boll Worm, Pink (see *Gelechia gossypiella*).
Cotton Boll Worm, Red (see *Diparopsis castanea*).
Cotton Boll Worm, Spiny (see *Earias insulana*).
Cotton-flower Bud-maggot (see *Contarinia gossypii*).
Cotton Leaf Blister-mite (see *Eriophyes gossypii*).
Cotton Leaf-roller (see *Sylepta derogata*).
Cotton Moth (see *Alabama argillacea*).
Cotton-root Aphis (see *Aphis maidiradicis*).
Cotton-seed Bug (see *Oxycarenus hyalinipennis*).
Cotton-seed Caterpillar (see *Pyroderces simplex*).
Cotton-seed Oil, formula for using, as a substitute for whale-oil soap, III. 458.
Cotton Stainers (see *Dysdercus*).
Cotton-stem Weevil (see *Pempheres affinis*).
Cotton Tree, American (see *Eriodendron anfractuosum*).
Cotton Worm, American (see *Alabama argillacea*).
Cotton Worm, Egyptian (see *Prodenia litura*).
Cotton Worm Moth (see *Chloridea obsoleta*).
Cottonwood (*Populus deltoides*), pests of, in N. America, I. 225, 325, 468, II. 251, 634, 662, III. 88, 351, 507, 513, 668.
Cottonwood Borer (see *Plectrodera scalator*).
Cottony Cushion Scale (see *Icerya purchasi*).
Cottony Maple Scale (see *Pulvinaria innumerabilis*).
Cottony Orange Scale (see *Pulvinaria aurantii*).
Coturniculus savannarum australis, destroying grasshoppers in U.S.A., II. 709.
Couch-grass, *Toxoptera graminum* on, I. 39; *Hylemyia coarctata* on, in Britain, I. 434.
Cowbird, destroying noxious insects in U.S.A., III. 249, 297.
Cow-parsley (see *Chaerophyllum silvestre*).
Cow-pea (*Vigna sinensis* and *V. catjang*), pests of, in E. Africa, I. 247, 414, 415; pests of, in Antigua, I. 258; *Agromyza phaseoli* on, in Australia, II. 541; *Agromyza phaseoli* on, in Ceylon, II. 541; *Bruchus chinensis* on, in Egypt, II. 505; *Dacus* (*Bactrocera*) *cucurbitae* on, in Hawaii, III. 163; *Pachytychius mungonis* on, in India, III. 444; *Maruca testulalis* on, in Java, III. 248; *Agromyza fabalis* on, in Rhodesia, I. 289, 290; pests of, in U.S.A., I. 430, III. 333, 453, 576; not seriously attacked by *Phthorimaea operculella* in U.S.A., I. 102; pests of, in the West Indies, II. 87, III. 477; usually resistant to *Heterodera radicicola*, III. 178.

Cowpea Weevil (see *Bruchus chinensis*).
Crabapple, pests of, in N. America, I. 281, 413, III. 57, 115, 258, 473, 586.
Crabgrass (*Panicum*), not attacked by *Heterodera radicicola* in U.S.A., III. 178; pests of, in U.S.A., I. 124, III. 574.
crabro, Vespa.
crabroniformis, Monacrostichus.
craccae, Aphis; *Apion.*
Crambus, in Mauritius, II. 612; parasitised by *Trichogramma* in Russia, III. 641; on maize in U.S.A., III. 708.
Crambus caliginosellus, bionomics of in U.S.A., II. 524, 525.
Crambus hortuellus, on cranberries in U.S.A., III. 672.
Crambus jucundellus, on grain in Russia, II. 171.
Crambus luteolus, on grain in Russia, II. 171.
cramerella, Acrocercops (*Zarathra*).
crameri, Clania.
Cranberry (*Vaccinium*), pests of, in U.S.A., II. 455, III. 52, 193, 530–532, 545, 668, 672.
Cranberry Fruit Worm (see *Mineola vaccinii*).
Cranberry Girdler (see *Crambus hortuellus*).
Cranberry Rootworm (see *Rhabdopterus picipes*).
Cranberry Spanworm (see *Epelis truncataria* var. *faxonii*).
Cranberry Tipworm (see *Perrisia vaccinii*).
Cranberry Toad Bug (see *Phylloscelis atra*).
Cranberry Weevil (see *Anthonomus suturalis*).
Crane, destroying locusts in S. Africa, II. 574.
Crane-fly (see *Tipula*).
crassa, Alloxysta.
crassicornis, Corizus (*Stictipleurus*); *Gonia*; *Hemiteles*; *Meraporus.*
crassinervis, Homoporus.
crassipennis, Phasia.
crassipes, Apiomerus.
crataegana, Tortrix (*Cacoecia*).
crataegella, Phyllorycter (*Lithocolletis*); *Recurvaria* (see *R. nanella*); *Scythropia.*
crataegi, Aphis; *Aporia*; *Conotrachelus*; *Eriosoma*; *Galeruca*; *Macrosiphum*; *Trichiura.*
Crataegus, Aspidiotus perniciosus on I. 472; pests of, in Russia, II. 369; pests of, in U.S.A., III. 57, 77, 270, 351, 375, 423, 718; as a bait tree against *Scolytus* spp., II. 51; (see Hawthorn).
Crataegus oxyacantha, Epitrimerus armatus on, in Britain, I. 237.
Cratopus punctum, in Mauritius, I. 31, II. 612.
Cratosomus reidi, on citrus in Brazil, II. 173, 175, 176.
crawfordi, Diachasma.
crawii, Pseudococcus.
Creatonotus gangis, on cotton and coffee in the Far East, II. 490.
creelii, Macrosiphum.
Creeping or Corn Thistle (see *Cirsium arvense*).
Cremastobombycia lantanella, introduced into Hawaii to destroy *Lantana*, III. 757.
Cremastogaster (Acrobat Ant), in the West Indies, III. 14, 583.
Cremastogaster lineolata, associated with *Thelia bimaculata* in U.S.A., III. 580.
Cremastogaster lineolata laeviuscula var. *clara*, attacking *Colias eurytheme* in U.S.A., III. 154.
Cremastogaster scutellaris, on cork oak in Sardinia, I. 221, 506.
Cremastus hymeniae, parasite of Lepidoptera in Hawaii, III. 568, 682.
Cremastus ornatus, parasite of *Phlyctaenodes sticticalis* in Russia, I. 535, III. 220.
Cremnops parvifasciatus, parasite of *Diatraea* spp. in Br. Guiana, I. 521, II. 568, III. 384.
Cremnops rufitarsis, sp. n., in French Guiana, II. 346.
Cremnops variabilis, sp. n., in French Guiana, II. 346.
Cremnops vulgaris (see *Agathis*).
crenaticeps, Atractomorpha.
crenatum, Opatrum.
crenulata, Atractomorpha; *Corticaria.*
crenulilla, Apterona.
crepidis, Aphidius.
Crepidodera aurata, on willows in England, III. 660.
Crepidodera cucumeris, on water melon in Costa Rica, I. 341.
Creolin, against Lamellicorn larvae, I. 29; against ants, III. 84; against *Anthrenus scrophulariae*, III. 559; against *Byturus tomentosus*, I. 206; against cutworms, I. 514, II. 612; against *Pseudococcus calceolariae*, II. 47.
Creosote, against *Eriosoma lanigerum*, III. 446, 708; against gipsy moth, II. 156, 295, 710; against *Psylla* spp., III. 282; against termites, I. 13, 465; against wood-borers, II. 75, III. 671, 672.
Cresol, against *Chortophila brassicae*, III. 370; against *Eriosoma lanigerum*, II. 4; against *Malacosoma*

fragilis, III. 16; against *Phylloxera*, II. 517.
cresphontes, *Papilio*.
Cress, *Phyllotreta sinuata* on, in Canada, III. 149, 565.
cressoni, *Hartigia*.
Cresyline, against cutworms, I. 514.
cretica, *Sesamia*.
cribratum, *Trinophyllum*.
cribratus, *Phloeosinus*.
cribricollis, *Otiorrhynchus*.
cribulosus, *Melanotus*.
Cricellius decipiens, hyper-parasite of *Polychrosis botrana* in Tyrol, III. 497.
Crickets, bionomics and control of, in India, II. 60; on tobacco in S. Rhodesia, I. 289; (see *Scapteriscus* and *Gryllotalpa*).
Criddle Mixture, preparation of, against locusts and grasshoppers, I. 453, II. 519, 542, III. 298, 368, 451.
Crimea, *Orthacanthacris* (*Acridium*) *aegyptius* on cotton in, II. 313; measures against *Eriosoma lanigerum* in, II. 76, III. 112; introduction of *Phylloxera* into, II. 167; bionomics of *Rhynchites pauxillus* in, III. 336; pests of beet in, I. 478, II. 465; forest pests in, I. 481, II. 274, 428, III. 544; grain pests in, II. 172, III. 339; orchard pests in, I. 345–349, 362, 364, 369, 439, II. 198, 330, 334, 419, III. 119, 339, 591, 613; pests of vines in, I. 461, 487, II. 355, 495.
crinigera, *Agrotis*.
crinitus, *Cardiophorus*; *Polistes*; *Sitones*.
Criocephalus rusticus, in timber in France, I. 42.
Crioceris asparagi (Asparagus Beetle), in Argentina, II. 593; bionomics and control of, in Canada and U.S.A., I. 15, 405, II. 247, 492, 665, III. 407, 551, 621; control of, in France, II. 420; in Germany, II. 501; on asparagus in Italy, III. 124; on asparagus in Russia, III. 221, 393.
Crioceris duodecimpunctata (Twelve-spotted Asparagus Beetle), bionomics and control of, in Canada and U.S.A., I. 296, 405, II. 492, 665, III. 551; on asparagus in Russia, II. 467, III. 221, 393, 481.
Crioceris livida, on yams in Nigeria, II. 108.
Crioceris merdigera (Lily Beetle), bionomics of, on lilies in Italy, II. 632; on asparagus and onions in Russia, III. 543, 544.
Crioceris quatuordecimpunctata, on asparagus in Russia, II. 467.
Crioceris quinquepunctata, on asparagus in Russia, II. 467, III. 481.
cristata, *Bucentes* (*Siphona*).
cristatus, *Oryctes*; *Pteromalus* (*Trichomalus*).
Croatia, *Psylliodes attenuata* in, I. 342.
crocale, *Catopsilia*.
crocata, *Mylabris* (*Zonabris*).
Crocidolomia binotalis (*Godara comalis*) (Cabbage Moth), on garden crops in Mauritius, III. 731; on turnips in Queensland, III. 6; on cabbage in Zanzibar, III. 125.
Crocidosema (see *Eucosma*).
Croesus castaneae, sp. n., on *Castanea dentata* in U.S.A., III. 658.
Croesus septentrionalis, destroyed by *Cuculus canorus* in Germany, II. 148; on alder, roses, etc., in Holland, I. 386, III. 743; control of, in Russia, III. 109, 401.
Crolas Mixture (carbon bisulphide and kerosene), against *Phylloxera*, III. 405.
Crossotarsus brevis, on *Castilloa elastica* in German Colonies, II. 414.
Crossotarsus saundersi, erroneously recorded as *Diapus heritierae*, III. 706.
Crossotarsus squamulatus, III. 723.
Crotalaria striata, pests of, in Ceylon, I. 411, II. 513, III. 83.
Croton, scale-insects on, in Australia, II. 652; *Pseudococcus adonidum* on, in California, II. 436; scale-insects on, in Ceylon, II. 644; pests of, in Br. Guiana, II. 417; *Pseudococcus citri* imported on, into U.S.A., III. 558; pests of, in the West Indies, I. 97, II. 533, III. 7?.
Croton floribundus, *Diploschema rotundicolle* on, in Brazil, II. 174.
Croton tiglium, pests of, in Ceylon, II. 191, 644; *Stictococcus dimorphus* on, in Uganda, III. 288.
Croton Bug (see *Orthezia praelonga*).
crotonis, *Pseudococcus*.
Crotophaga ani (Tick Bird), destroying insect pests in the West Indies, I. 36, 83, 182, 183, 184, 233, 521, II. 48, 60, 62.
Crown Gall, intercepted in quarantine, in California, III. 495.
Crows, destroying insect pests, I. 518, II. 68, 121, 148, 222, 509, 535, III. 24, 196, 243, 249, 404.
cruciata, *Antestia*; *Corymbites*.
crucifera, *Anisoplia*.

cruciferae, Phyllotreta.
cruciferarum, Plutella (see *P. maculipennis*).
cruenta, Hyperaspis.
cruentata, Sarcophaga.
cruentatus, Novius.
cruzi, Prodecatoma.
Cryphalus abietis, on silver fir in Scotland, III. 406.
Cryphalus congonus, on rubber in the Belgian Congo, II. 414.
Cryphalus jalappae, on jalap plant in Mexico, I. 351.
Cryphalus major, on pines in India, III. 729.
Cryphalus piceae, on *Abies orientalis* in Germany, II. 501.
Cryphalus plumierae, on *Hevea* in Ceylon, I. 89.
Cryptacrus comes, on coffee in E. Africa, I. 415.
Cryptarthrum walkeri, on *Urostigma* in Dammar Is., I. 351.
Crypticus quisquilius, on maize in Italy and France, III. 541.
Cryptoblabes (*Ephestia*) *gnidiella*, on cotton in Egypt, II. 321, 505, 506; on vines in Italy, III. 113.
Crytoblabes proleucella, destroying *Coccus viridis* in Ceylon, II. 644, III. 174, 647.
Cryptocampus angustus, attacked by *Eurytoma*, II. 471.
Cryptocephalus callias, on *Manihot glaziovii* in E. Africa, II. 415.
Cryptocephalus coryli, on *Corylus* in Russia, II. 672.
Cryptochaetum curtipenne, parasite of *Walkeriana kandyense* in Ceylon, II. 307, 652.
Cryptochaetum iceryae, parasite of scale-insects, II. 307, III. 143.
Cryptococcus fagi (Felted Beech Coccus), bionomics of, in Germany, II. 571; on beech in Nova Scotia, II. 203, 204; on forest trees in the United Kingdom, I. 464, III. 754.
Cryptococcus nudatus (see *Kuwanina parva*).
Cryptognatha flavescens, destroying *Aleurodes citri* in India, I. 278.
Cryptognatha nodiceps, destroying *Aspidiotus destructor* in Br. Guiana and Trinidad, II. 416, 569, III. 14.
Cryptogonus orbiculus (see *Aspidimerus*).
Cryptohypnus, on wheat in Canada, III. 507.
Cryptohypnus abbreviatus (Abbreviated Wireworm), in U.S.A., III. 299.
Cryptolaemus montrouzieri, II. 243, 436; introduced into Br. Guiana against *Pseudococcus calceolariae*, I. 522; destroying mealy-bugs in Costa Rica, I. 20; introduced into Hawaii, III. 757; controlling scale-insects in the New Hebrides, III. 744; destroying *Pseudococcus sacchari* in Porto Rico, I. 185, 390, II. 48; in bait-traps for *Ceratitis capitata*, III. 568.
Cryptolechia flava, on coffee in Br. Guiana, I. 343.
Cryptomeigenia aurifacies, parasite of *Lachnosterna* in Porto Rico, I. 184, 389, II. 48.
Cryptomeigenia theutis, nocturnal habits of, in U.S.A., III. 248.
Cryptophaga, on fruit in Australia, III. 492.
Cryptorrhynchus, on cassava and beans in Barbados, III. 504, 626; imported into the Gold Coast in mangos from Ceylon, II. 142; on sugar-cane in Queensland, III. 289.
Cryptorrhynchus batatae (see *Euscepes*).
Cryptorrhynchus lapathi, on willows, etc., in Britain, II. 192, III. 346, 660, 715; on poplars in Holland, III. 743; on poplars and willows in U.S.A., III. 515.
Cryptorrhynchus mangiferae (Mango Weevil), in mangos in E. Africa, I. 414; in mangos in Ceylon, II. 540; in mangos imported into U.S.A., II. 461, III. 626; in mangos in Zanzibar, III. 125.
Cryptothrips brevicollis, sp. n., on vines in Cyprus, III. 749.
Cryptothrips floridensis, on camphor in Ceylon, II. 597, III. 357; on camphor in Florida, I. 149, 512, II. 597, III. 326.
Cryptothrips pini, sp. n., on pines in Florida, III. 357.
Cryptus formosus (see *Onielella*).
Cryptus minutulus, parasite of vine moths, III. 211.
Cryptus profligator, parasite of *Depressaria apicella* (*nervosa*) in Germany, I. 515.
Crystostachys, not attacked by rhinoceros beetles in the Seychelles, II. 568.
Cteniopus sulphureus, on sugar-beet in Russia, III. 94.
Ctenochiton araucariae, on *Araucaria* in Australia, III. 652.
Ctenochiton cellulosus, on *Melaleuca nodosa* in Australia, III. 652.
Ctenochiton eucalypti, on *Eucalyptus siderophloia* in Australia, III. 652.
Ctenochiton rhizophorae, on *Rhizophora mucronata* in Australia, III. 652.

Ctenochiton serrata, sp. n., on *Acacia* in Australia, III. 652.
Ctenochiton spinosus (*Lecanium armatum*), on *Muehlenbeckia australis* in New Zealand, III. 721.
Ctenochiton transparens, sp. n., in Australia, III. 652.
Ctenophora angustipennis, in orchards in Oregon, III. 267.
Ctenophora apicata, in Maine, III. 267.
Ctenopseutis obliquana (New Zealand Peach Moth), exclusion of, from California, III. 275.
Ctenucha virginica, in Maine, I. 141.
Ctonoxylon amanicum, on coffee in Kamerun, I. 351.
Cuba, *Agriotes segetis* in, III. 525; *Aleurodes howardi* introduced into Florida from, I. 267; cotton boll weevil in, III. 12; *Eriopus floridensis* in, II. 92; *Palaeococcus* on prickly pear in, III. 126; *Papilio* spp. on citrus in, II. 311; *Phthorimaea operculella* on potato in, II. 280; *Pseudococcus sacchari* on sugarcane in, I. 103; *Tomaspis* sp. in, II. 62; pests of cassava in, III. 367; pests of tobacco in, I. 324, 525; pests from, intercepted in U.S.A., III, 558, 657; caprification of figs in, I. 341; calcium carbide against ants in, II. 624.
cubicolle, Apion.
Cuckoos, destroying noxious insects, I. 223, 464, 481, II. 222, 394, III. 196, 297.
Cucullia lactucae, on lettuce and chicory in France, I. 256, 504.
Cucullia lucifuga, on lettuce and chicory in France, I. 256, 504.
Cuculus canorus, eating forest insects, II. 148.
cucumarius, Dacus.
Cucumber (*Cucumis sativus*), pests of, in E. Africa, I. 246; *Carpomyia pardalina* on, in Baluchistan, II. 426; pests of, in Britain, II. 564, III. 285, 659; pests of, in Canada and U.S.A., I. 53, 218, 241, 299, 324, 418, 430; II. 83, 120, 161, 459, 465, 644, III. 89, 471, 472; *Dacus bipartitus* on, in the Gold Coast, II. 672; Aphids on, in Guam, III. 373; pests of, in Porto Rico, III. 476; pests of, in Russia, I. 362, 460, 487, 493, II. 34, 266, 425, 488, 521, III. 219, 227, 436, 486, 544; spinning mites on, in Sweden, III. 253.
Cucumber Beetle, Striped (see *Diabrotica vittata*).
Cucumber Beetle, Twelve-spotted (see *Diabrotica soror*).
cucumeris, Aphis; *Crepidodera*; *Epitrix.*
Cucumis citrullus (see Water-melon).
Cucumis melo (see Melon).
Cucumis sativus (see Cucumber).
Cucurbita pepo (see Pumpkin).
cucurbitae, Acyrthosiphon (*Macrosiphum*); *Aphis* (see *A. gossypii*); *Dacus* (*Bactrocera*).
Culex, II. 717.
culiciformis, Lissonota.
culmicolus, Tarsonemus.
culta, Acmaeodera.
cumingi, Promecotheca.
cunea, Hyphantria.
cuneiformis, Saissetia.
cunicularis, Hylesinus.
Cupran, as an insecticide, II. 482.
cuprarius, Sargus (*Macrosargus*).
cupressi, Pseudococcus.
Cupressus, Hyalarcta huebneri on, in Australia, II. 493.
Cupressus goveniana, Pseudococcus andersoni on, in California, II. 435.
Cupressus macnabiana, Pseudococcus dudleyi on, in California, II. 435.
Cupressus macrocarpa (Monterey Cypress), *Pseudococcus* spp. on, in California, II. 435, 436.
cupreus, Poecilus; *Pterostichus* (*Platysma*); *Rhynchites.*
Cupric Sprays (see Copper).
curculionis, Canidiella.
curculionoides, Attelabus (see *A. nitens*); *Haplocnemia* (*Mesosa*).
curialis, Arctia (see *Hyphoraia testudinaria*).
Currant (*Ribes*), pests of, in Britain, I. 236, 237, II. 8, 563, 656, III. 277, 305, 676; pests of, in Canada and U.S.A., I. 237, 275, 277, 405, 406, 413, 418, 425, 476, 515, II. 208, 217, 380, 390, 459, 492, 509, 513, 537, 675, 710, III. 52, 68, 108, 181, 182, 258, 270, 335, 372, 414, 457, 459, 515, 554, 677; pests of, in Germany, II. 296, 406, 500, 502, 590, 642; pests of, in Greece, I. 409; *Eriosoma ulmi* (*fodiens*) on, in Holland, III. 200; pests of, in Russia, I. 206, 208, 476, 489, 493, II. 81, 82, 337, 341, 369, 370, 480, 513, III. 45, 99, 204, 210, 220, 222, 224, 225, 311, 389, 399, 401, 610, 640, 642.
Currant, Black (*Ribes nigrum*), pests of, in Britain, I. 139, 245, 433, II. 8, 656, III. 303, 305; pests of, in France, I. 71, 228, II. 421, 622; pests of, in

Germany, II. 296, 406, 500; pests of, in Holland, III. 199, 201, 740; pests of, in Russia, I. 460, II. 81, 82, 370, 513, 514, III. 210, 224, 401, 540.
Currant, Red (*Ribes rubrum*), *Aulacaspis pentagona* on, I. 222; not attacked by *Lymantria dispar* in U.S.A., III. 669.
Currant, Wild, *Aphis houghtonensis* on, in California, II. 251.
Currant Aphis (see *Myzus ribis*).
Currant Aphis, White-cornicled (see *Aphis varians*).
Currant Borer (see *Aegeria tipuliformis*).
Currant Fruit Fly (see *Epochra canadensis*).
Currant Fruit Weevil (see *Pseudanthonomus validus*).
Currant Gall-mite (see *Eriophyes ribis*).
Currant Moth (see *Abraxas grossulariata*).
Currant Root Louse (see *Eriosoma ulmi*).
Currant Sawfly (see *Pteronus ribesii*)
Currant Shoot Moth (see *Incurvaria capitella*).
Currant Spanworm (see *Diastictis ribearia*).
Currant Stem Girdler (see *Janus integer*).
Currant Thrips (see *Liothrips montanus*).
Currant Worm (see *Pteronus ribesii*).
cursitans, Piezostethus.
curtipenne, Cryptochaetum.
curtula, Pygaera.
curtus, Platypus.
curvator, Andricus.
curvicauda, Scudderia; Toxotrypana.
curvilineata, Heptasmicra.
curvipes, Anoplocnemis; Lachnopus.
cushmani, Secodella.
cuspidatus, Lygus.
Custard Apple (see *Anona reticulata*).
custodiens, Plagiolepis.
Cutworms, I. 17, 49, 83, 84, 144, 182, 194, 287, 302, 405, 412, 413, 417, 462, 476, 513, II. 23, 24, 118, 159, 197, 248, 299, 302, 306, 314, 315, 336, 361, 363, 381, 487, 521, 537, 560, 564, 570, 585, 591, 629, 663, 680, 709, III. 18, 19, 68, 70, 71, 78, 85, 178, 193, 249, 264, 327, 335, 338, 359, 363, 368, 370, 407, 411, 419, 426, 435, 450, 470, 507, 531, 564, 620, 628, 708, 732; natural enemies of, I. 462, 521, 540, II. 147, 212, 248, 335, 342, 629, III. 46, 78, 111, 145, 249, 264, 342, 369, 371, 398, 407, 536, 553, 570, 629, 682, 684; remedies against, I. 84, 182, 194, 287, 462, II. 24, 54, 118, 159, 248, 302, 314, 336, 361, 381, 442, 521, 560, 565, 629, 680, III. 18, 19, 78, 86, 193, 264, 327, 359, 369, 371, 411, 419, 426, 450, 469, 470, 529, 565, 620, 628, 684, 732; (see *Agrotis, Euxoa, Lycophotia*, etc.).
Cutworm, Brown (see *Nephelodes emmedonia*).
Cutworm, Common (see *Euxoa segetum*).
Cutworm, Dark-sided (see *Euxoa messoria*).
Cutworm, Dingy (see *Feltia subgothica*).
Cutworm, Greasy (see *Agrotis ypsilon*).
Cutworm, Red-backed (see *Euxoa ochrogaster*).
Cutworm, Spotted (see *Agrotis c-nigrum*).
Cutworm, Spotted-legged (see *Porosagrotis vetusta*).
Cutworm, Striped (see *Euxoa tessellata*).
Cutworm, Variegated (see *Lycophotia margaritosa*).
Cutworm, W-marked (see *Agrotis unicolor*).
Cutworm, White Climbing (see *Lycophotia scandens*).
Cutworm, Yellow-headed (see *Aplectoides speciosa* and *Parastichtis arctia*).
Cutworm, Yellow-striped (see *Prodenia praefica*).
Cutworm, Zebra (see *Polia nevadae*).
Cyanamide, against *Colaspidema atrum*, II. 58.
cyanea, Aeschna; Gastroidea; Scutellista.
cyanella, Lema.
Cyanide (see Hydrocyanic Acid).
cyanipennis, Asbecesta.
Cyanopepla submaculata, on sugar-cane in Mexico, I. 184.
cyanophylli, Aspidiotus.
Cyanophyllum magnificum, Saissetia oleae intercepted on, in California, III. 626.
cyathigera, Anisoplia.
Cybister, immune against *Coccobacillus cajae*, I. 167.
Cybocephalus, predaceous on *Aulacaspis pentagona* in Ceylon, III. 83.
Cybocephalus nigritulus, predaceous on *Fiorinia theae* in U.S.A., I. 101.
Cycas, Aulacaspis rosae on, in Australia, III. 80; *Catochrysops pandava* on, in Ceylon, III. 157.
Cycas circinalis, Selenaspidus articulatus intercepted on, in California, III. 495.

Cycas officinalis (Pseudo-sago Palm), *Chrysomphalus aonidum* on, in the Seychelles, II. 566.
Cycas revoluta (Sago Palm), scale-insects on, in California, II. 436; III. 357; *Euchrysops pandava* on, in Ceylon, III. 24.
Cyclamen, pests of, in Britain, II. 656; *Otiorrhynchus* on, in U.S.A., II. 183, III. 372.
Cyclamen persicum giganteum, control of thrips on, in Russia, III. 400.
Cyclocephala, habits of, in U.S.A., III. 355.
Cyclocephala dimidiata, on cotton in Grenada, I. 254, II. 87.
Cyclocephala signata, on sugar-cane in Br. Guiana, I. 522, II. 58.
Cyclocephala tridentata, on cotton in Dominica and St. Lucia, I. 254.
Cyclocephala vincentiae, on arrow-root in St. Vincent, I. 254, III. 411.
Cycloconius, II. 289.
Cycloneda sanguinea (*munda*), bionomics of, in Brazil, III. 169; bionomics of, in U.S.A., I. 81, 511, II. 131, 697, III. 64, 132, 760; predaceous on Aphids in the West Indies, I. 258, II. 49, III. 674.
Cyclopelta siccifolia, on cacao in Ceylon, II. 643, III. 62, 663.
Cydia, on peas in Russia, II. 341; parasitised by *Bracon scutellaris*, II. 426.
Cydia amplana, distribution of, II. 419; on *Corylus* and walnut in Russia, II. 672, III. 207.
Cydia caryana, food-plants of, in Kentucky, I. 54.
Cydia (*Grapholitha*) *dorsana*, on peas in Russia, III. 481.
Cydia (*Grapholitha*) *funebrana*, distribution of, II. 419; on plums in Argentina, II. 164; in orchards in France, I. 227, II. 421; on fruit in Germany, II. 500; on plums in Italy, III. 124; control of, in orchards in Russia, I. 368, 432, 460, II. 36, 42, 73, 291, 318, 366, 419, 638, 700, 714, III. 46, 183, 220, 224, 393, 402, 601, 606.
Cydia leplastriana, bionomics and control of, in Italy, II. 347.
Cydia nigricana, on peas in France, I. 411.
Cydia pisana, on peas in France, II. 420.
Cydia (*Carpocapsa*) *pomonella* (Codling Moth), II. 145; in S. Africa, I. 473; on apricots in Algeria, III. 739; in S. Australia, II. 584, III. 78, 97, 158, 408, 527; control of, in Britain, II. 8, III. 676; not present in British Columbia, I. 85; bionomics and control of, in Canada, I. 48, 401, 404, 413, II. 491, 492, 665, 675, III. 69, 515, 619; control of, in France, I. 239, III. 694; in Germany, I. 470, 515, 529, II. 500; on pear and walnut in Italy, III. 124; in Mauritius, III. 731; in New Zealand, II. 234, III. 79; in Norway, III. 108; in Portugal, I. 313, 314; bionomics and control of, in Russia, I. 206, 208, 357, 363, 364–367, 368–370, 398, 431, 460, 484, 491, 496, 536, II. 42, 44, 54, 73, 74, 198, 200, 264, 291, 298, 318, 330, 334, 335, 341, 369, 428, 463, 515, 524, 614, 638, 647, 700, 713, 714, 718, III. 13, 27, 33, 34, 41, 46, 51, 52, 66, 92, 112, 118, 119, 152, 172, 183, 204, 214, 219, 220, 224, 235, 241, 311, 338, 393, 399, 402, 442, 481, 482, 540, 591, 601, 607, 613; loss due to, in Russia, II. 291; in Tasmania, II. 66; bionomics and control of, in U.S.A., I. 54, 130, 175, 180, 282, 290, 384, 427, 435, 451, 467, 475, 509, II. 23, 137, 138, 359, 457, 537, III. 150, 179, 193, 290, 413, 418, 420, 445, 451, 475, 494, 511, 625, 691, 717, 734, 737; loss due to, in U.S.A., III. 52; in Uruguay, II. 162; distribution and food-plants of, II. 419; legislation against, I. 48, 85, II. 83, 84, 300, 707; natural enemies and diseases of, I. 347, 363, 365, 368, 431, 436, 489, II. 74, 137, 138, 198, 222, 263, 307, 335, 386, 523, 553, 554, 585, III. 35, 112, 219, 241, 418, 476, 613, 625, 691; measures against, I. 276, 366, 407, 426, 452, 529, II. 190, 359, 387, 457, 484, 560, 561, III. 27, 34, 78, 119, 413, 419, 445, 591, 619, 734, 737; relative immunity of apples, from, III. 484.
Cydia putaminana, in orchards in Bessarabia, II. 42, III. 224.
Cydia schistaceana (see *Argyroploce*).
Cydia splendana, on almond in Spain, III. 276.
Cydia splendana var. *reaumurana*, on cork oak and chestnuts in Portugal, I. 314.
Cydia strobilella, in Sweden and Lapland, II. 243.
Cydonia japonica (Japanese Quince) scale-insects on, II. 390, 435; *Aphis brevis* on, in U.S.A., III. 375.
Cydonia vulgaris (see Quince).
cydoniae, Aspidiotus.

Cylas brunneus, on sweet potatoes in Nigeria, III. 167.
Cylas formicarius (Sweet-potato Weevil), distribution of, I. 218, III. 461; on sweet potatoes in Barbados, III. 461; intercepted on sweet potatoes in U.S.A. from China and elsewhere, I. 217, III. 558, 625, 690; on sweet potatoes in the Gold Coast, II. 672; on sweet potatoes in Porto Rico, III. 477; on sweet potatoes in Uganda, I. 49; in Zanzibar, III. 125.
Cylas puncticollis, on sweet potatoes in Nigeria, III. 167.
cylindrica, Trypeta.
cylindriformis, Corymbites.
cyllarus, Lycaena.
Cyllene robiniae (Locust Miner), on acacia, etc., in N. America, III. 43, 474, 515, 552, 584, 673.
Cyllin, ineffective against *Gelechia gossypiella*, II. 219.
Cyllophorus rubrosignatus, sp. n., on fig in Natal, III. 167.
Cymatophora (*Diastictis*) *ribearia* (Currant Span Worm), on currants and gooseberries in U.S.A., I. 476.
cymbiforme, Lecanium (see *Eulecanium persicae*).
Cymene, as an insecticide, III. 284.
Cymindis marginalis, predaceous on *Laphygma frugiperda* in Porto Rico, III. 477.
Cynara, Aphis cynarae on, in Egypt, III. 749.
Cynara scolymus (see Artichoke).
cynarae, Aphis.
Cynips, destroyed by *Parus caeruleus*, I. 306.
Cynips kollari, on oak in Bessarabia, III. 225; galls of, destroyed by birds, I. 169.
Cynips lignicola, galls of, destroyed by birds, I. 169.
Cynodon dactylon, Toxoptera graminum on, in S. Africa, II. 153; *Odonaspis ruthae* on, in Hawaii, III. 726; *Margarodes* spp. on, in India, I. 158.
Cynoglossum officinale (Dog's Tongue), *Aphis adjecta* on, in England, III. 633; *Aphis pruni* on, II. 81.
Cynoglossum pictum (Hound's Tongue), *Phthorimaea operculella* on, II. 401.
Cynometra alexandri, food-plant of *Anaphe infracta* in Africa, I. 33; *Anaphe venata* on, in Africa, II. 548.
cynosbati, Janus.
cynthia, Attacus (*Samia*).
cyparissiae, Acyrthosiphon (*Macrosiphum*).
cyperi, Carolinaia.
Cyperus (see Nutgrass).
Cyperus esculentus, Carolinaia cyperi on, in Florida, III. 406.
Cyperus flavicomus, Sphenophorus callosus on, in U.S.A., I. 262.
Cyphocleonus tigrinus, in Russia, II. 482, III. 342.
Cyphokentia samoensis, Oryctes rhinoceros on, in Samoa, II. 26.
Cypress, *Morimus funereus* on, in France, III. 11; *Eleutheroda dytiscoides* on, in Hawaii, III. 411; pests of, in U.S.A., II. 543, 707, III. 515; not attacked by *Lymantria dispar* in U.S.A., III. 43, 669.
Cypress, Monterey (see *Cupressus macrocarpa*).
Cyprus, bionomics of *Cryptothrips brevicollis*, sp. n., on vines in, III. 749, 750; experiments with Corvusiene in, I. 26.
Cyrtacanthacris (*Acridium*) *melanocornis*, on *Ficus* and *Hevea* in Java, III. 313.
Cyrtacanthacris (*Acridium*) *rubellus*, on sugar-cane in Réunion, II. 216.
Cyrtacanthacris septemfasciata (Red Locust), III. 461; bionomics of, in S. Africa, I. 473, III. 720; on sugar-cane in Réunion, II. 216.
Cyrtogaster glasgowi, parasite of *Brachydeutera argentata* in Illinois, II. 307.
Cyrtotrachelus longipes, bionomics of in India, I. 354, 381.
cyssea, Amata (*Syntomis*).
Cysteochila aethiopica, on olive in Africa, III. 432.
Cysteochila pallens, on olive in Africa, III. 433.
Cysteochila sordida, on olive in Cape Colony, III. 432.
Cytherea obscura, parasitic on locusts in Turkestan, II. 509, III. 40.
Cytisus, Aspidiotus tasmaniae, sp. n., on, in Australia, III. 548; *Anisoplia deserticola* on, in Russia, I. 486.

D.

daci, Halticoptera; Sigalphus.
dacica, Montandoniella.
dacicida, Opius; Tetrastichus.
Dacnusa, parasite of *Chlorops taeniopus* in Russia, III. 601.
Dacnusa agromyzae, sp. n., parasite of *Agromyza angulata* in U.S.A., I. 238.
Dacnusa scaptomyzae, parasite of *Scaptomyza flaveola* in U.S.A., I. 238.

Dacrydium, Coptotermes gestroi on, in Java, I. 355.
dactyliperda, Coccotrypes.
Dactylis glomerata (Cocksfoot Grass) *Amphorophora subterrans*, sp. n., on, in Oregon, III. 588.
dactylopii, Leptomastix.
Dactylopius, on coconut in the New Hebrides, II. 691.
Dactylopius calceolariae (see *Pseudococcus*).
Dactylopius citri (see *Pseudococcus*).
Dactylopius coccus (Cochineal Insect), bionomics of, on prickly pears in S. Africa, II. 440; on *Opuntia* in U.S.A., I. 78; bionomics and distribution of, III. 126; history of cultivation of, I. 315.
Dactylopius (*Coccus*) *confusus*, on *Opuntia* in U.S.A., I. 81.
Dactylopius confusus capensis, attempt to introduce, into Mauritius, II. 612; introduced into Queensland from S. Africa, III. 126.
Dactylopius confusus indicus, introduced into S. Africa, III. 503; on prickly pear in Ceylon and India, III. 126; attempt to introduce into Mauritius, II. 612; introduced into Queensland from Ceylon, III. 126.
Dactylopius confusus newsteadi, confined to *Nopalea cochinelifera*, III. 126.
Dactylopius longispinus (see *Pseudococcus adonidum*).
Dactylopius maritimus (see *Pseudococcus*).
Dactylopius obtusus (see *Pseudococcus*).
Dactylopius perniciosus (see *Pseudococcus filamentosus*).
Dactylopius sacchari (see *Pseudococcus*).
Dacus, Hymenopterous parasites of, in Africa, II. 317.
Dacus (*Tridacus*) *armatus*, from S. Nigeria, III. 748.
Dacus bipartitus, bionomics of, in the Gold Coast, II. 672; parasitised by *Tetrastichus dacicida* in Kamerun, III. 433.
Dacus (*Chaetodacus*) *bipustulatus*, sp. n., from Mysore, III. 27.
Dacus bistrigatus, on Cucurbitaceae in E. Africa, I. 415.
Dacus (*Tridacus*) *bivittatus*, distribution of, in Africa, III. 748.
Dacus brevis, from Durban, III. 748.
Dacus brevistylus, on citrus in Africa, III. 748; on Cucurbitaceae in E. Africa, I. 415; on melon in India, III. 27.
Dacus caudatus, food-plants of, in Java, III. 4.
Dacus cucumarius, on Cucurbitaceae in E. Africa, I. 415; parasitised by *Tetrastichus giffardi* in W. Africa, I. 388.
Dacus (*Bactrocera*) *cucurbitae* (Melon Fly), intercepted in water-melons in California, III. 494; on vegetable-marrow in Ceylon, I. 89, II. 644; bionomics of, in Hawaii, II. 598, III. 29, 36, 163, 364, 374; food-plants of, in Java, III. 4; arsenate of lead against, in Mauritius, III. 756; in the Philippines, II. 116; experiments in destroying fruit infested with, III. 357.
Dacus (*Tridacus*) *disjunctus*, sp. n., from Uganda, III. 748.
Dacus (*Tridacus*) *eburneus*, sp. n., from Uganda, III. 748.
Dacus (*Bactrocera*) *ferrugineus* (Mango Fly), distribution of, I. 157; on mango in India, II. 427; bionomics of, in Java, III. 4, 713; in Mauritius, II. 612, III. 731, 756; (*tryoni*) in New South Wales, III. 158.
Dacus ficicola, sp. n., on fig in Africa, III. 748.
Dacus (*Tridacus*) *humeralis*, sp. n., from Nigeria, III. 748.
Dacus immaculatus, from Natal, III. 748.
Dacus inornatus, from the Congo, III. 748.
Dacus (*Leptoxyda*) *longistylus*, sp. n., on *Calotropis procera*, in Africa and India, III. 27, 748.
Dacus (*Tridacus*) *lounsburyi*, distribution of, in Africa, III. 748.
Dacus (*Tridacus*) *momordicae*, nom. n., from Kamerun, III. 748.
Dacus oleae (Olive Fly), parasites of, in South Africa, II. 298, III. 432; on olives in Algeria, I. 174, 419, II. 125; in Cape Colony, III. 748; in Eritrea, III. 173, 431; bionomics of, in S. France and Corsica, I. 229, 420, II. 421; control of, in Italy, I. 271, II. 289, 452, 479, 577, III. 276, 429, 434, 705; introduction of parasites of, into Italy, II. 86, 298; on olives in Palestine, II. 623; imported into U.S.A. in olive seed from Cape Town, III. 454; measures against, I. 271, II. 289, 452, 479, 577, III. 29, 36.
Dacus (*Tridacus*) *punctatifrons*, distribution of, in Africa, III. 748.
Dacus rufus, sp. n., from Rhodesia, III. 748.
Dacus (*Tridacus*) *sphaeristicus*, in E. Africa, III. 748.
Dacus tryoni (see *D. ferrugineus*).

Dacus vertebratus, on Cucurbitaceae in Africa, III. **125, 748.**
Dacus vertebratus var. *marginalis*, distribution of, in Africa, III. **748.**
Dacus (*Tridacus*) *xanthopterus*, sp.n., from Nyasaland, III. **748.**
Dacus zonatus (Queensland Fruit Fly), control of, in Bengal, II. **558**; in Tahiti, II. **116.**
Dadap (see *Erythrina*).
daedalus, Castnia.
Daffodil, control of *Merodon equestris* on, II. **89.**
daghestanica, Podonta.
Dahlia, *Pseudococcus affinis* on, in Australia, II. **435**; pests of, in Canada, III. **551**; *Saissetia nigra* on, in Ceylon, III. **725**; attacked by earwigs in Germany, II. **547**; *Phytometra chalcites* on, in New Zealand, III. **721**; *Dichocrocis punctiferalis* on, in Queensland, II. **20**; *Lygus pratensis* on, in U.S.A., II. **185**; *Aphis rumicis* on, II. **494, 661.**
Dahomey, parasites of *Ceratitis giffardi* in, I. 388, III. 433; search for fruit-fly parasites in, II. 316; *Coccophagus orientalis* var. *modesta*, parasite of *Saissetia nigra* in, III. 433; *Stictococcus diversiseta* in, III. 434; termites from, II. 610.
Daincha, pests of, in Madras, II. 138.
Daisy Flea Bane (*Erigeron ramosus*), *Lygus pratensis* on, in Canada, II. **593.**
Dakota, South, *Diabrotica longicornis* in, I. **429**; forest pests in, I. **51.**
Dalbergia latifolia, Oxyrhachys tarandus on, in India, II. **242.**
Dalbergia sissoo, Apoderus sissu on, in India, I. **119.**
dalbergiae, Monophlebus.
dalmani, Prophanurus.
Dalmatia, insect pests in, I. **189, 239, 342, 392,** II. **377, 419, 482**; cultivation of *Pyrethrum cinerariaefolium* in, I. **230,** III. **736.**
Damaster blaptoides, on Japanese azaleas in New Jersey, III. **354.**
Dammara orientalis, attacked by *Coptotermes gestroi* in Java, I. **355.**
Dammara ovata, Pseudococcus aurilanatus on, in California, II. **435.**
Dammara vitiensis, Pseudococcus aurilanatus on, in California, II. **435.**
damnifica, Schistocerca.
Damson, pests of, in Britain, I. **388**; III. **9, 80**; *Scolytus* spp. on, in Germany, II. **485**; *Tetranychus bimaculatus* on, in Missouri, III. **180**; *Cydia pomonella* on, in Portugal, I. **313.**
Dandelion (see *Taraxacum officinale*).
Dangleberry, not attacked by *Lymantria dispar* in U.S.A., III. **669.**
danica, Locusta (*Pachytylus*).
Daphne gnidium, Cryptoblabes gnidiella on, in Egypt, II. **505, 506**; food-plant of *Polychrosis botrana*, I. **71,** II. **405,** III. **210.**
daplidice, Pieris.
dara, Padraona.
Dargida procincta (see *Hadena*).
Dark Gothic Moth (see *Naenia typica*).
darwini, Lepidiota.
darwiniensis, Pulvinaria.
Dascillus cervinus, on oats in Denmark, III. **698.**
Dastarcus confinis, predaceous on *Epepeotes meridianus*, in Java, II. **535.**
Dasycera sulphurella, food-plants of, in England, III. **660.**
Dasychira fascelina, on lucerne and walnut in Russia, I. **527,** III. **206.**
Dasychira horsfieldi, on tea in the Far East, II. **490.**
Dasychira mendosa, on tea and coffee in the Far East, II. **490.**
Dasychira pudibunda (Hop-dog), on apple in Britain, II. **562,** III. **659**; bionomics of, on beech in Holland III. **195–197**; on walnut in Russia, III. **206.**
Dasychira securis (see *Psalis*).
Dasygnathus australis, on sugar-cane in Queensland, III. **491.**
Dasygnathus dejeani, on sugar-cane in Queensland, III. **491.**
Dasyllis flavicollis, predaceous on *Malacosoma disstria* in Canada, II. **665.**
Dasyneura bryoniae (see *Perrisia*).
Dasyneura leguminicola (see *Perrisia*).
Dasyneura (*Cecidomyia*) *oenophila* (see *Janetiella*).
Dasyneura raphanistri (see *Perrisia*).
Dasyneura trifolii (see *Perrisia*).
Dasyscypha (*Peziza*) *calycina* (Larch Canker), in Britain, III. **190, 277.**
Dasystoma flava (False Foxglove), *Olethreutes hebesana* on, in Canada and U.S.A., III. **659.**
dasystomus, Mallodon.
Datana, parasitised by *Apanteles lacteicolor*, in U.S.A., II. **187.**
Datana integerrima (Black Walnut Caterpillar), bionomics of, on walnuts, etc., in Canada and U.S.A., I. **524, 525,** III. **552, 581, 584.**
Datana ministra (Yellow-necked Apple Caterpillar), on apples, etc., in Canada and U.S.A., I. **281,** III. **552, 581.**

Date Palm (*Phoenix dactylifera*), *Selenaspidus articulatus* on, in E. Africa, I. 415; pests of, in Arizona, I. 180, 518, III. 512; Coccids on, in California, III. 84; pests of, in Egypt, I. 218, II. 321, 506; *Oryctes rhinoceros* on, in Straits Settlements, II. 99; Coccids on, imported into U.S.A., II. 461.
Dates, *Myelois phoenicis* infesting, in Algeria, III. 762; *Coccotrypes dactyliperda* in, in Egypt, I. 351, II. 506.
Datura (Thorn Apple), *Dihammus fistulator* on, in Java, II. 535; *Prodenia litura* on, in Russia, I. 482; method of preparing decoction of, against orchard pests, III. 611; mosaic disease of tobacco in, I. 19.
Datura meteloides, *Trichobaris trinotata* on, in California, III. 690.
Datura stramonium, *Diabrotica duodecimpunctata* on, I. 430; food-plant of *Pegomyia hyoscyami*, III. 608; *Phthorimaea operculella* on, I. 288, II. 280.
daucicola, *Aphelinus*.
Daucus carota (see Carrot).
davidsoni, *Sarcophaga*.
Daviesia, *Pulvinaria tecta* on, in New South Wales, III. 503.
dawsoni, *Melanoplus*.
De Cillis' Formula, against *Dacus oleae*, I. 271, III. 36; against *Chyliza persicorum*, I. 310.
Dead Nettle (*Lamium*), *Cladobius farinosus* on, in Italy, III. 54.
Deadly Nightshade (*Atropa belladonna*), food-plant of *Pegomyia hyoscyami*, II. 616.
dealbana, *Gypsonoma*.
dearnessi, *Phenacoccus*.
debilis, *Labrorychus*.
decastigma, *Melanophila*.
Decatoma, parasite of gall-flies in California, I. 36.
Decatoma aethiopica, sp. n., on olive in Africa, III. 432.
Decatoma catenata, on cotton in Nyasaland, II. 277.
Decatoma mellea, parasite of *Isosoma rossicum*, in Russia, II. 472.
Deccan Grasshopper (see *Colemania sphenarioides*).
decemlineata, *Leptinotarsa* (*Doryphora*).
decempunctata, *Coccinella*; *Brachyacantha*; *Mylabris* (*Zonabris*).
Deckenia, rhinoceros beetle on, in the Seychelles, II. 568.
declarata, *Euxoa* (see *E. tessellata*).
declinata, *Saraca*.
declivis, *Chromoderus*.
decoloratus, *Asaphes*.
decora, *Galerucella*; *Thrips*.
decoratum festivum, *Eurydema*.
decorticata, *Cacochroa*.
Decticus (see *Tettigonia*).
definita, *Hemerocampa*.
defoliaria, *Hybernia*.
degeeri, *Eupelmus*.
Degeeria flavicans, parasite of *Pteronus ribesii* in France, II. 622.
Degeeria funebris, parasite of *Haltica* and *Arctia caja* in France, I. 173, 419.
Deilemera annulata, bionomics of, in New Zealand, III. 721.
Deilephila elpenor (see *Chaerocampa*).
Deilephila lineata (see *Celerio*).
Deilephila nerii, on cinchona in E. Africa, I. 415.
Deiopeia, parasitised by *Trichogramma pretiosum* in Sumatra, I. 13.
dejeani, *Dasygnathus*; *Mylabris* (*Zonabris*).
delauneyi, *Dysdercus*.
delectus, *Nysius*.
Delias aglaia, on tea in Assam, III. 65.
delicatus, *Chaitophorus*.
delira, *Spilochalcis*.
delorata, *Porosagrotis* (see *P. orthogonia*).
Delouix regia, bag-worms on, in Manila, I. 314.
Delphacidae, Monograph of American, II. 41.
Delphax maidis (see *Peregrinus*).
Delphax oryzae, on rice in Japan I. 520.
Delphax purcipera, on rice in Japan, I. 520.
Delphax saccharivora (see *Stenocranus*).
Delphax striatella, on rice in Japan, I. 520.
Deltocephalus configuratus, in Maine, III. 530.
Deltocephalus inimicus, in Maine, III. 530.
Deltocephalus striatus, on wheat in Russia, I. 359, III. 481.
demetrius, *Papilio*.
Demilysol, against Aphids, I. 471, II. 482; against mites on vines, I. 469.
demodocus, *Papilio*.
demoleus, *Papilio*.
Demuth's Dip, against termites, I. 465.
Dendrin, against vine mites, I. 469.
Dendrocalamus strictus, pests of, in India, I. 354, III. 723.
Dendroctonus borealis, on spruce and pine in Canada, II. 24, 25.

Dendroctonus brevicomis, on pines in British Columbia, I. **407**, II. **25**, III. **2**.
Dendroctonus engelmanni, on spruce and pine in British Columbia, II. **25**.
Dendroctonus frontalis, on *Pinus echinatus*, in U.S.A., III. **725**.
Dendroctonus micans, destroyed by birds in Germany, II. **148**, **529**.
Dendroctonus monticolae (Mountain Pine Beetle), on pines in Canada and U.S.A., II. **25**, **308**, **645**, III. **2**, **3**.
Dendroctonus murrayanae, on Conifers in Canada, I. **407**, II. **25**, III. **3**, **43**.
Dendroctonus obesus, on spruce and pine in British Columbia, II. **25**, III. **3**.
Dendroctonus piceaperda, on spruce in Canada and U.S.A., II. **24**.
Dendroctonus ponderosae, on *Pinus ponderosa* in Canada and U.S.A., I. **51**, **407**.
Dendroctonus pseudotsugae, on Conifers in Canada and U.S.A., I. **407**, II. **25**, III. **3**, **670**.
Dendroctonus simplex, on Conifers in Canada, I. **407**, II. **25**, III. **43**.
Dendroctonus valens, on Conifers in Canada, I. **407**, II. **25**, III. **2**.
Dendroica aestiva, insect food of, in U.S.A., I. **303**.
Dendroica pennsylvanica (Chestnut-sided Warbler), destroying insects in Pennsylvania, III. **420**.
Dendrolimus (*Gastropacha*, *Malacosoma*) *pini*, in Austria, II. **482**; parasitised by *Goniocerus xanthopus* in Germany, III. **249**; bionomics of, in Russia, I. **432**, II. **220–222**, III. **227**, **391**, **398**, **699**, **728**; destroyed by birds, II. **148**; experiments with *Pimpla* and, II. **214**.
Dendrolimus segregatus, bionomics of, in Russia and Siberia, II. **220–223**.
Dengink's Remedy, formula for, against *Melolontha*, III. **343**.
Denmark, *Orgyia antiqua* imported into U.S.A. from, III. **455**; insect pests in, II. **54**, **453**, **476**, **502**, III. **147**, **245–247**, **526**, **697–699**.
denominanda, *Hypera*.
Denops, predaceous on *Sinoxylon sexdentatum* in France, III. **10**.
Denops albofasciatus, predaceous on vine moths in Russia, I. **524**, II. **196**, III. **211**.
densiflorae, *Aspidiotus*.
dentata, *Leptodera*; *Melitara*.
dentatus, *Pamphilius*.
denticolle, *Calosoma*.
denticollis, *Myochrous*.
denticornis, *Cerotoma*; *Limothrips*.
denticrus, *Megasphasma*.
denticulatus, *Coreus* (*Coriomeris*).
Dentifibula, destroying Coccidae, III. **134**.
Dentifibula ceylonica, sp. n., parasite of *Hemichionaspis*, III. **725**.
Dentifibula obtusilobae, sp. n., parasite of scale-insects, III. **725**.
dentipes, *Chrysobothris*.
dentosa, *Omphalocera*.
denudatus, *Diaprepes abbreviatus*.
deplanatus, *Homalonotus*.
depressa, *Saissetia* (*Lecanium*).
Depressaria, destroyed by earwigs, I. **43**, II. **547**.
Depressaria apicella (*nervosa*), bionomics of, on caraway seeds, I. **159**, **515**, III. **220**, **741**; on parsnips in France, I. **504**.
Depressaria badiella, on parsnips in France, I. **504**.
Depressaria depressella, on parsnips in France, I. **504**.
Depressaria heracleana, on parsnips in England, I. **43**; on parsnips in France, I. **504**; on parsnips in Holland, III. **741**.
Depressaria hofmanni, on parsnips in France, I. **504**.
Depressaria marcella, on carrots and fennel in France, I. **227**, II. **420**.
Depressaria nervosa (see *D. apicella*).
Depressaria propinquella (see *Pinaris*).
Depressaria subpropinquella, on artichokes, I. **227**.
depressella, *Depressaria*; *Papua*.
depressiusculus, *Semanopterus*.
depressum, *Opatrum*; *Stirastoma*.
depressus, *Pytho*.
depunctalis, *Nymphula*.
derasofasciatus, *Agrilus*.
Derelomus kamerunicus, on oil palms in Dahomey, III. **167**.
Dericorys annulata, in Sicily, III. **40**.
Dermatitis, caused by *Pediculoides ventricosus*, II. **502**.
Dermestes, infesting tea in Ceylon, I. **88**.
Dermestes frischi, from Tiflis, II. **467**.
Dermestes lardarius, in grain, etc., in Russia, II. **503**, III. **399**, **633**.
Dermestes vulpinus, temperature experiments against, I. **153**.
dermestoides, *Lymexylon*.
Derocrepis rufipes, on lucerne in Europe, I. **527**.
derogata, *Sylepta*.
Derostenus, controlling *Agromyza pusilla*, in U.S.A., III. **363**.
Derostenus agromyzae, parasite of *Agromyza angulata* in Indiana, II. **288**.

Derostenus arizonensis, parasite of *Agromyza pusilla* in U.S.A., II. **46, 288.**
Derostenus diastatae, parasite of *Agromyza* spp. in U.S.A., II. **46,** III. **133.**
Derostenus pictipes, parasite of *Agromyza pusilla* in U.S.A., II. **46.**
Derostenus punctiventris, parasite of *Agromyza pusilla* in U.S.A., II. **46.**
Derostenus varipes, parasite of *Agromyza* spp. in U.S.A., II. **46, 288.**
deserticola, Anisoplia.
desertorum, Callostoma; *Tetranychus.*
Desiantha nociva, on potatoes in Victoria, II. **119.**
Desmia funeralis (Grape Leaf-folder), intercepted in California, III. **420**; on vines in U.S.A., III. **85, 181.**
Desmodium, Gracilaria violacella on, in North America, I. **343.**
Desmodium cephalotes, Xyleborus sp. on, in Ceylon, III. **83.**
despecta, Phlyctaenia.
destructor, Acyrthosiphon (*Macrosiphum*) *pisi*; *Aleurodicus*; *Aspidiotus*; *Mayetiola* (*Cecidomyia*); *Merisus*; *Scolytus.*
destruens, Xyleborus.
determinata, Adrama.
detersa, Euxoa.
detrita, Pimpla.
Deudorix antalus, on beans in E. Africa, I. **415.**
devastator, Melanoplus; *Tylenchus.*
devastatrix, Oscinis; *Sidemia* (*Hadena*); *Tylenchus.*
devoniensis, Eriococcus.
Dewberry (*Rubus caesius*) pests of, in Russia, II. **52,** III. **235, 440**; pests of, in U.S.A., III. **52.**
deyrollei, Psylliodes.
Dhaincha (see *Sesbania aculeata*).
Diabrotica, on citrus in California, III. **419, 622.**
Diabrotica balteata (Belted Cucumber Beetle), control of, in U.S.A., III. **295.**
Diabrotica bivittata, food-plants of, in Porto Rico, III. **476, 517.**
Diabrotica duodecimpunctata (Western Twelve-spotted Cucumber Beetle), bionomics and control of, in U.S.A., I. **419, 429, 430, 431,** II. **140, 543,** III. **136, 406, 570, 709.**
Diabrotica graminea, on sugar-cane, etc., in Porto Rico, I. **185, 389,** II. **49,** III. **476.**
Diabrotica innuba, food-plants of, in Porto Rico, III. **476, 517.**
Diabrotica longicornis, bionomics of, in U.S.A., I. **429, 430,** II. **703,** III. **136, 425.**
Diabrotica soror (Twelve-spotted Cucumber Beetle), bionomics and control of, in U.S.A., I. **17,** II. **161, 246, 438,** III. **85, 272, 348, 557, 689.**
Diabrotica trivittata, food-plants of, in Oregon, II. **161.**
Diabrotica vittata (Striped Cucumber Beetle), on Cucurbitaceae in Canada and U.S.A., I. **405, 418, 419, 430,** II. **406, 459, 644,** III. **163, 472, 531, 552**; on water melon in Costa Rica, I. **341**; in Porto Rico, I. **389**; destroyed by *Sturnella magna*, II. **708**; Tachinid parasites of, II. **272.**
diabroticae, Celatoria.
Diacantha conifera, on Leguminous and Cucurbitaceous plants in Nyasaland, II. **277.**
Diachasma crawfordi, parasite of *Anastrepha striata* in Costa Rica, I. **321.**
Diachasma fullawayi, bred and liberated in Hawaii, III. **169, 364, 412, 413, 493, 549, 712.**
Diachasma tryoni, established in Hawaii against *Ceratitis capitata*, II. **317,** III. **364, 412, 413, 493, 549, 712, 758.**
Diacrisia (*Spilosoma*) *lubricipeda*, on vines in France, II. **362**; on vines in Italy, III. **113**; on cabbage in Russia, I. **499,** III. **403.**
Diacrisia maculosa, on cacao in Nigeria, II. **107,** III. **165, 663.**
Diacrisia mendica, on lettuce and vines in France, I. **504,** II. **362.**
Diacrisia obliqua, on cotton, rice, etc., in the Far East, II. **490.**
Diacrisia strigatula, on coffee, sugar-cane, etc., in Far East, II. **490.**
Diacrisia virginica, on onions, etc., in U.S.A., III. **570, 709.**
Diadegma, parasite of *Recurvaria nanella* in U.S.A., III. **141.**
diadema, Epeira.
diademata, Phyllotreta.
Diadiplosis, preying on Coccidae, III. **134.**
Diadiplosis (*Karschomyia*) *cocci*, predaceous on *Saissetia nigra* in Ceylon, II. **271**; predaceous on *Pseudococcus sacchari* in Porto Rico, III. **134.**
Diadiplosis coccidivora, predaceous on scale-insects in Ceylon, II. **271, 651.**
Diadiplosis hirticornis, sp. n., bred from mealy-bugs in Japan, III. **725.**
Diadiplosis smithi, sp. n., predaceous on *Pulvinaria* in Manila, III. **725.**
Diaeretus rapae (see *Aphidius*).

Dialeurodes citri (see *Aleurodes*).
Diamerus fici, on *Ficus elastica* in India, I. **351.**
Diamond-back Moth (see *Plutella maculipennis*).
dianthi, Rhinocola ; *Rhopalosiphum.*
Dianthus, Hypera arator on, in Holland, III. **743.**
Dianthus caryophyllus (see Carnation).
Diaphania hyalineata, on Cucurbitaceae in U.S.A., I. **218, 264, 419,** III. **471.**
Diaphania nitidalis (Pickle-worm), on Cucurbitaceae in U.S.A., I. **53, 218, 264, 419,** II. **120,** III. **471, 516.**
Diapheromera femorata, bionomics of, in U.S.A., II. **600,** III. **17, 181, 545.**
Diaprepes, on sugar-cane in Porto Rico, I. **185.**
Diaprepes abbreviatus (Sugar-cane Root-borer), on sugar-cane in the West Indies, I. **83, 98,** II. **32, 531, 532, 693,** III. **22.**
Diaprepes abbreviatus comma, distribution of, in the West Indies, III. **627.**
Diaprepes abbreviatus denudatus, distribution of, in the West Indies, III. **627.**
Diaprepes abbreviatus festivus, distribution of, in the West Indies, III. **627.**
Diaprepes abbreviatus marginatus, distribution of, in the West Indies, III. **627.**
Diaprepes abbreviatus spengleri, bionomics and distribution of, in the West Indies, I. **83, 165,** II. **48, 50, 693,** III. **518, 627, 680.**
Diaprepes (*Exophthalmus*) *esuriens*, on sugar-cane, etc., in the West Indies, I. **165,** II. **87, 88, 603, 693, 698,** III. **22, 301, 302, 627.**
Diaprepes (*Exophthalmus*) *famelicus* on cacao and limes in the West Indies, II. **602, 693** ; distribution of, III. **627.**
Diapromorpha melanopus, on tea in India, III. **488.**
Diapus furtivus, on *Shorea robusta*, etc., in India, III. **706, 722, 723.**
Diapus heritierae, Crossotarsus saundersi erroneously recorded as, III. **706.**
Diapus mirus (see *D. furtivus*).
Diapus quinquespinatus, on *Shorea robusta* in India, III. **723.**
diaspidis, Aphelinus.
Diaspis boisduvali (Coconut Snow Scale), food-plants of, in Australia and New Zealand, III. **80** ; on bananas in Br. Guiana, II. **417** ; on coconut in Jamaica, III. **650** ; on palms in Peru, III. **135** ; imported on orchids and palms into U.S.A., III. **117, 354, 469, 513, 626** ; on coconut in the West Indies, II. **87.**
Diaspis bromeliae, on pineapples in Australia, III. **80** ; intercepted on pineapples in U.S.A., III. **420, 494, 558, 625, 690, 739.**
Diaspis echinocacti, on *Opuntia* in Peru, III. **135.**
Diaspis fallax (see *Epidiaspis pyricola*).
Diaspis gennadii, on *Pistacia vera* imported from Italy, II. **461.**
Diaspis newsteadi, sp. n., from S. Africa, II. **353.**
Diaspis ostreaeformis (see *Epidiaspis pyricola*).
Diaspis patelliformis (see *Aulacaspis pentagona*).
Diaspis pentagona (see *Aulacaspis*).
Diaspis rosae (see *Aulacaspis*).
Diaspis senegalensis, sp. n., on *Khaya senegalensis* in Senegal, II. **425.**
Diaspis taxicola, sp. n., on *Taxus baccata* in Algeria, II. **92.**
Diaspis tricuspidata, sp. n., in Nigeria, II. **353.**
Diaspis (*Aulacaspis*) *zamiae*, on *Cycas revoluta* in California, III. **357.**
diastatae, Derostenus.
Diastictis ribearia (see *Cymatophora*).
Diastocera reticulata, on kapok in E. Africa, I. **414.**
Diatraea, on sugar-cane in Br. Guiana, I. **139** ; on sugar-cane in India, II. **139** ; on sugar-cane in the West Indies, II. **460, 646** ; parasites of, I. **319,** II. **32, 568.**
Diatraea canella, bionomics of, on sugar-cane in Br. Guiana, I. **521,** II. **30, 58, 520, 568,** III. **27** ; on sugar-cane in the West Indies, II. **30.**
Diatraea grandiosella, parasitised by *Telenomus* in Mexico, I. **184.**
Diatraea lineolata, on sugar-cane in Br. Guiana, I. **521,** II. **30** ; on sugar-cane in the West Indies, II. **30.**
Diatraea orichalcocilliella, on sorghum in E. Africa, I. **415.**
Diatraea saccharalis (Small Moth Borer of Sugar-cane), on sugar-cane in the Far East, II. **490** ; bionomics of, on sugar-cane in Br. Guiana, I. **319, 521,** II. **58, 497, 520, 568,** III. **27, 590** ; on maize in Java, III. **385** ; bionomics of, on sugar-cane and maize in U.S.A., I. **104, 225,** II. **279,** III.

184, 760; on sugar-cane in the West Indies, I. 184, 263, 435, II. 30, 48, 88, III. 674; natural enemies of, I. 184, 319, 435, 521, II. 48, 279, 497, 520, 568, III. 26, 28; remedies against, II. 58, 279, 568.
Diatraea venosata (*striatalis*) (Striped Sugar-cane Borer), bionomics of, in Java, I. 170. III. 26, 62, 383; bionomics of, on sugar-cane in Mauritius, I. 31, II. 215, III. 730, 756.
Diaulinopsis callichroma, parasite of *Agromyza pusilla* in U.S.A., II. 46.
Diaulinus, parasite of *Agromyza pusilla* in U.S.A., III. 363.
Diaulinus begini, parasite of *Agromyza pusilla* in U.S.A., II. 46.
Diaulinus insularis, parasite of *Agromyza inaequalis* in Porto Rico, III. 151.
Diaulinus websteri, parasite of *Agromyza pusilla* in U.S.A., II. 46.
Dibrachoides dynaster, parasite of *Hypera murina* in Russia, II. 109.
Dibrachys, parasite of *Recurvaria nanella* in U.S.A., III. 141.
Dibrachys affinis, hyper-parasite of *Polychrosis botrana* in Tyrol, III. 497; parasite of *Polychrosis botrana* and hyper-parasite of *Pieris brassicae*, II. 588.
Dibrachys boucheanus, hyper-parasite of *Polychrosis botrana* in Tyrol, III. 497; hyper-parasite of *Acronycta clarescens*, in U.S.A., II. 132; parasite of *Orgyia antiqua* in U.S.A., III. 268.
Dibrachys meteori, hyper-parasite of *Cirphis* spp. in Texas, III. 684.
Dicaelotus resplendens, parasite of *Polychrosis botrana* in Italy, III. 497.
Dicasticus, on coffee in E. Africa, II. 570.
Dicasticus gerstaeckeri, on camphor, cotton, etc., in E. Africa, I. 11, 414, II. 415, 580.
Dicerca berolinensis, on Lombardy poplar in Astrachan, III. 221.
Dicerca obscura, on persimmon in N. Carolina, I. 161.
Dicerca pugionata, on black alder in Carolina, I. 161.
Dicerca punctulata, on pines in N. Carolina, I. 160.
Dichamus fistulator (see *Dihammus*).
Dichlorobenzene, fumigation with, against insect pests, III. 330.
Dichocrocis punctiferalis, bionomics of, on papaws and bananas in Queensland, II. 20, 511.
Dichomeris ianthes, on lucerne in Ceylon, III. 24, 157.
Dichomeris (*Ypsolophus*) *ligulella* (Palmer Worm), in Ontario, I. 404; on apples in U.S.A., I. 290, II. 380.
dichroa, Tephraea.
dichromus, Bracon.
Dichrostachys nutans, Pulvinaria dichrostachys, sp. n., on, in Eritrea II. 346.
dichrostachys, Pulvinaria.
dicincta, Mylabris.
Dicraneura cockerelli, on vines in Arizona, I. 180.
Dicranura (*Harpyia*) *vinula*, on poplar and willow in Astrachan, III. 221.
Dicrodiplosis, preying on Coccidae, III. 134.
Dictha, on tobacco in Rhodesia, I. 289.
Dictyna volupis, predaceous on *Tortrix fumiferana* in U.S.A., I. 202.
Dictyopharina serene, on coffee in S. Nigeria, II. 108.
Dictyosperma album, Oryctes rhinoceros on, in the Straits Settlements, II. 99.
dictyospermi, Chrysomphalus (*Aspidiotus*).
Dictyotus plebeius, on strawberry in N.S.Wales, III. 366.
Dicymolomia pegasalis, infesting *Polistes annularis* in Montserrat, III. 736.
Dicyphus minimus, on tomato in Florida, III. 179.
Didactylomyia ceylonica, sp. n., from Ceylon, III. 725.
didactylus, Scapteriscus.
didyma, Apamea (see *Trachea secalis*); *Melitara.*
didymus, Phileurus.
Dielis dorsata (see *Campsomeris*).
Dielis formosus, attacking *Lepidiota albohirta* in Queensland, III. 751.
differens, Theridion.
differentialis, Melanoplus.
difficilis, Chionaspis.
difformis, Cladius; *Omorgus.*
difurcata, Mylabris.
Digitalis purpurea (Foxglove), *Xanthoecia flavago* on, I. 410.
Digitaria sanguinalis, Aspidiotus perniciosus on, I. 472.
Diglochis omnivora, parasite of *Colias* in France, II. 577.
Dihammus fistulator, on rubber, coffee, etc., in Java, II. 535, III. 661.
dilatata, Chionaspis; *Eubussea.*
dilatifasciella, Zophodia.
dilatus, Porcellio.

dilineatus, Hyalopterus.
Dill, pests of, in Russia, II. 425, III. 220.
dillenii, Opuntia.
Diloba coeruleocephala (see *Episema*).
Dilophonota ello (see *Erinnyis*).
dilophonotae, Telenomus.
Dilophus carunculatus (Wattled Starling), destroying locusts in S. Africa, II. 574.
dilucidana, Loxoptera.
dilutata, Oporabia.
dilutus, Mesochorus.
dimidiata, Cyclocephala.
dimidiatus, Carpophilus; *Homocidus.*
diminuta, Chalcis.
Dimorphopteryx autumnalis, on *Quercus rubra* in U.S.A., III. 418.
Dimorphopteryx castaneae, on *Castanea dentata* in U.S.A., III. 417, 418.
Dimorphopteryx errans, on birch and linden in U.S.A., III. 418.
Dimorphopteryx quercivora, on *Quercus rubra* in U.S.A., III. 418.
dimorphus, Stictococcus.
Dinapate wrighti, parasitised by *Sarcophaga* spp. in U.S.A., III. 452.
Dinara (*Anticyra*) *combusta*, on rice and sugar-cane in the Far East, I. 169, II. 489.
Dinaspis, on *Maytenus boaria* in Chile, III. 303.
Dinaspis distincta, sp. n., in Pretoria, II. 353.
Dinaspis giffardi, sp. n., in French Guiana, II. 353.
Dinaspis lounsburyi, sp. n., in Pretoria, II. 353.
Dinaspis pseudomorpha, sp. n., in French Guinea, II. 353.
Dinaspis silvestrii, sp. n., in French Guinea, II. 353.
Dindymus rubiginosus, predaceous on *Lawana candida* in Java, III. 315.
Dindymus versicolor (Harlequin Fruit Bug), on strawberry in N.S. Wales, III. 366.
diniana, Enarmonia (*Steganoptycha*).
Dinocampus, parasite of Coccinellids in S. Africa, II. 154.
Dinocampus terminatus, parasite of Coccinellids in Russia, I. 457.
Dinoderus distinctus, I. 247.
Dinoderus minutus, on bamboo in Zanzibar, III. 124.
Dinurothrips hookeri, sp. n., in Porto Rico, II. 130.
Diocalandra frumenti (*Calandra taitensis*), on coconut in E. Africa, I. 414; on coconut in Java, III. 316; on coconut in the South Sea Islands, II. 2, 690.
Diocalandra stigmaticollis (see *D. frumenti*).
Dioctes exareolatus, parasite of *Cydia pomonella* in Russia, I. 366.
Dioctes melania (see *Angitia*).
Dioctes obliteratus, parasite of *Polychrosis viteana* in U.S.A., I. 113.
Dionychus parallelogramus, in bamboos in Brazil, III. 696.
Dioretus obsoletus, parasite of *Macrosiphum granarium* in Russia, I. 364.
Dioryctria, II. 649; on pines in Russia, II. 516.
Dioryctria abietella, on pines in Russia, II. 516; in Sweden, II. 243.
Dioryctria abietella var. *pinetella*, on pines in Russia, I. 539, II. 516.
Dioryctria schutzeella, on pines in Russia, II. 516; on spruce in Sweden, III. 290.
Dioryctria (*Phycis*) *splendidella*, in Russia, II. 516.
Dioscorea (see Yam).
Dioscorea aculeata, III. 724.
Dioscorea alata, pests of, in Singapore, III. 723.
Dioscorea anguina, Loxura atymnus on, in Singapore, III. 724.
Dioscorea bulbifera, Theretra nessus on, in India, III. 724.
Dioscorea cirrhosa, Tagiades gana on, in Singapore, III. 724.
Dioscorea cumingii, III. 724.
Dioscorea pentaphylla, Theretra nessus on, in Singapore, III. 724.
Dioscorea pyrifolia, Theretra nessus on, in Singapore, III. 724.
Dioscorea triphylla, III. 724.
diospyri, Psylla (*Trioza*).
Diospyros ebenum (Ebony Tree), *Coccotrypes integer* in, in Ceylon, I. 351.
Diospyros kaki (see Persimmon).
Diospyros montana, Hypocala moorei on, in Ceylon, III. 157.
Diparopsis castanea (Red Boll-worm) bionomics of, on cotton in Tropical Africa, I. 272, 349, II. 2, 107, 277, III. 164.
Diplazon laetatorius (see *Bassus*).
Diplognatha gagates, on cotton in Africa, II. 1, 2, III. 174.
Diplolepis folii (see *Dryophanta*).
Diplolepis (*Cleptes*) *nitidulus*, parasite of *Pteronus ribesii* in France, II. 622.
Diplolepis quercus-folii, galls of, eaten by birds, I. 169.
Diplopseutis perieresalis, in New Zealand, I. 343.
diploptera, Blissus.
Diploschema rotundicolle, bionomics and control of, on citrus in Brazil, II. 173, 174, 175.

Diplosia, parasitic on scale-insects in Java, I. 3.
Diplosine, on radishes in France, I. 257.
Diplosis (see *Contarinia*).
Diplosis acarivora (see *Cecidomyia*).
Diplotaxis erucoides, planted in vineyards as a trap for *Nysius senecionis*, II. 228, 556, 557.
Diplotaxis popino, on peach and strawberry in Arizona, III. 512.
Diprion lecontei (see *Lophyrus*).
Diprion similis (see *Lophyrus pini*).
diprioni, Lagarotis.
dipsacea, Chloridea (*Heliothis*).
Dipsacus sylvestris, Aphis ochropis on, I. 78.
Dirhicnus alboannulatus, parasite of *Panolis flammea* in Germany, III. 249.
Dirhinus giffardi, introduction and establishment of, in Hawaii, II. 317, III. 289; introduction of, into Italy, II. 86.
dirhodum, Aphis; *Macrosiphum.*
Dirophanes plesius (see *Phygadeuon*)
Dirphya (*Nitocris*) *princeps* (Yellow headed Coffee Borer), on coffee in E. Africa, I. 49, II. 275, 276, 447, 596, III. 751.
Dirphya usambica, on coffee in E. Africa, I. 414, II. 276.
discalis, Popillia.
discicollis, Cardiophorus.
discigera, Atta.
Discoelius zonalis, destroying vine pests in France, II. 607.
discoideus, Bracon; *Chilocorus*; *Limonius.*
discolor, Metopius; *Sphenophorus*; *Xyleborus.*
Discophora celinde, on sugar-cane and coconut in the Far East, II. 490.
discrepans, Lecanium.
disjuncta, Microphthalma.
disjunctus, Dacus (*Tridacus*).
Disonycha mellicollis (Yellow-necked Flea-beetle), in U.S.A., I. 292.
Disonycha quinquevittata, on willow in California, III. 85, 494.
Disonycha triangularis, on Beet in Canada and U.S.A., I. 298.
Disonycha varicornis, on *Opuntia* in U.S.A., I. 81.
Disonycha xanthomelaena (Spinach Flea-beetle), on spinach and beet in Canada and U.S.A., I. 292; 298, II. 664.
Disophrys lutea, from French Guinea II. 346.
dispar, Lymantria (*Ocneria, Porthesia, Porthetria*); *Lepidosaphes* (*Coccomytilus, Mytilaspis*); *Tylenchus*; *Xyleborus* (*Tomicus*).
disparis, Limnerium.
dissimile, Eurydema ornatum.
dissimilis, Arthrolytus; *Ichneumon*; *Mamestra* (see *Polia suasa*); *Phytoscaphus.*
Dissosteira carolina, control of, in New York, III. 450.
Dissosteira longipennis, Sarcophagid parasites of, in U.S.A., III. 82.
disstria, Malacosoma (*Clisiocampa*).
distichus, Phyllanthus.
distigma, Chilocorus.
distincta, Dinaspis.
distinctum, Zorontogramma.
distinctus, Dinoderus.
Ditropinotus aureoviridis, parasite of *Isosoma* in Russia, II. 502.
diversicolor, Mesochorus.
diversiciliatus, Eretmocerus.
Diversinervus elegans, parasite of *Saissetia oleae* in Eritrea, III. 432.
diversiseta, Stictococcus.
divinatoria, Troctes.
divisella, Nephopteryx.
Djipsin (or Gypsin), against insect pests in Russia, I. 348, 362, 367, 478, 492, II. 180, 249, 262, 274, 291, 292, 330, 366, 428, 467, 522, 637, 647, 700, 714, 720, III. 13, 27, 106, 393, 604, 637; ineffective against *Biston hirtarius*, III. 50; formulae for, I. 348, 367, II. 720, III. 26; as a substitute for Paris green, III. 13, 109; (see also Lead Arsenate).
Dociostaurus (*Stauronotus*) *anatolicus*, in Turkestan, II. 509.
Dociostaurus brevicollis, bionomics of, in Russia and Siberia, II. 474, 475, 509, III. 537, 636.
Dociostaurus kraussi, bionomics of, in Russia and Turkestan, II. 475, 509, 614, 716, III. 44, 636.
Dociostaurus (*Stauronotus*) *maroccanus* (Moroccan Locust), in Afghanistan and India, II. 38; control of, in Algeria, II. 462, 475, III. 428; in Dalmatia, II. 482; on vines in Italy, III. 113; control of, in Italy, III. 497; bionomics and control of, in Russia and Turkestan, I. 459–460, 542, 551, II. 38–39, 65, 72, 170, 248, 353, 473–475, 480, 508, 614, 716, III. 44, 109, 241, 242, 243, 437, 602; bionomics of, in Sicily, III. 39–41; experiments with *Coccobacillus acridiorum* and, II. 238, 462, 681, III. 24, 118, 683.
Dociostaurus tartarus, in Turkestan, II. 509.
Dock (*Rumex*), Aphids on, I. 78, II. 406, III. 9; pests of, in California II. 303, 555, III. 270, 625; food-plant of *Lixus concavus* in U.S.A.,

III. 709; not attacked by *Lymantria dispar* in U.S.A., III. 669.
dodecella, Exotelia (*Heringia*).
Dog's Tongue (see *Cynoglossum officinale*).
Dogwood (*Cornus*), *Lymantria dispar* on, in Russia, III. 43; pests of, in U.S.A., I. 140, II. 390, III. 350, 462; not attacked by *Lymantria dispar* in U.S.A., III. 669; (see *Cornus* spp.).
dohrni, Kaliosysphinga.
Dolerus niger, predaceous on *Psylla* in Russia, II. 370.
Dolichoderus bituberculatus, attacking *Helopeltis bergrothi* in W. Africa, III. 662, 663; associated with *Drosicha lichenoides* in the Philippines, I. 148.
Dolichos lablab, Bruchus ornatus on, in E. Africa, I. 247, 414, 415.
Doloessa viridis, on rice in the Far East, II. 489.
Dolopius lateralis, in Okanagan, II. 676.
dolus, Lycaena.
Dolycoris baccarum, on mustard, etc., in Russia, II. 355, 358, III. 45, 220, 393, 479, 601; bionomics and control of, in Sweden, III. 208.
Dolycoris indicus, investigation into life-history of, in India, III. 145.
Dombeya acutangula, Icerya jacobsoni on, in Java, I. 150.
domestica, Thermobia.
domesticum, Anobium.
domesticus, Glyciphagus; Opilo; Xyloterus.
domiciliorum, Epeira.
Dominica, citrus pests in, I. 251, 253, 257, II. 88, 145, III. 22, 73; *Cyclocephala tridentata* on cotton in, I. 254; sugar-cane pests in, I. 165, 253, II. 693; fungi infesting scale-insects in, I. 76, 77.
dominica, Glottula (see *Brithys crini*); *Rhizopertha.*
Domomyza nigripes, on wheat in Russia, II. 172.
Dorcadion carinatum, on grain in Russia, II. 172.
Dorcadion equestre, on cereals in Russia, I. 487; destroyed by rooks, III. 342.
Dorcus parallelopipedus, in Russia, II. 110.
dorsalis, Chalepus; Coryna; Entomoscelis; Epacromia; Odontota; Taragama.
dorsana, Cydia (*Grapholitha*).
dorsata, Campsomeris (*Dielis*).
dorsator, Microbracon.
dorsatus, Chorthippus.
Doryctes palliatus, in bait-traps for *Ceratitis capitata*, III. 568.
Dorylus helvolus, destroying *Busseola* (*Sesamia*) *fusca* in S. Africa, I. 145.
Dorylus orientalis, on kohl-rabi in Ceylon, II. 644.
Doryphora decemlineata (see *Leptinotarsa*).
doryphorae, Doryphorophaga (*Phorocera*).
Doryphorophaga (*Phorocera*) *doryphorae*, parasite of *Leptinotarsa decemlineata*, in U.S.A., III. 372.
Dorytomus longimanus, on poplars in Russia, III. 222.
Doticus pestilens, on apples and bananas in Australia, II. 511.
Douglas Fir (see *Pseudotsuga taxifolia*).
Douglas Fir Pitch Moth (see *Aegeria novaroensis*).
Douglas Fir Seed Chalcid (see *Megastigmus spermatrophus*).
douglasi, Phrynosoma; Typhlocyba.
Doum Palm (see *Hyphaene*).
Doves, destroying rice in Trinidad, II. 574.
downesi, Mallodon (*Stenodontes*).
Draba verna, Phyllotreta nemorum on, in Russia, I. 211.
Dracaena, Pseudococcus adonidum on, in California, II. 436.
dracaenae, Parthenothrips.
Draeculacephala angulifera, in Maine, III. 530.
Draeculacephala mollipes, bionomics of, in U.S.A., III. 530, 576.
Draeculacephala noveboracensis, in Maine, III. 530.
Drasterius amabilis, predaceous on other insects in U.S.A., III. 300.
Drasterius elegans, destroying *Diatraea saccharalis* in Louisiana, III. 384; a minor enemy of *Diabrotica duodecimpunctata* in U.S.A., I. 431; confusion of, with *Cryptohypnus abbreviatus*, III. 299.
Drasterius livens, on sugar-beet in California, II. 303.
Dreata petola, on maize and sugar-cane in Java, I. 169.
dregei, Calidea; Epilachna.
Drepana falcataria, in Russia, III. 400.
Drepanaphis acerifolii, on maple in California, II. 247, III. 85.
Drepanothrips reuteri, on vines in Russia, III. 405.
Drepanothrips viticola, on vines in Russia, II. 267.
Dreyfusia pectinatae (see *Chermes*).
Dried Fruits, pests of, I. 313, II. 506, 511, III. 221, 262, 575, 684, 762.
Dried Fruit Beetle (see *Carpophilus hemipterus*).

Drosicha lichenoides, sp. n., on *Ficus nota* in the Philippines, I. **148.**
Drosophila, on apricots in Algeria, III. **739**; source of nitrogenous compounds required for development of, III. **273.**
Drosophila ampelophila (see *D. melanogaster*).
Drosophila melanogaster, on vines in Italy, III. **113.**
Drosophila phalerata, on onions and garlic in Russia, III. **544.**
druparum, Anthonomus (see *A. rectirostris*).
drupiferarum, Hyloicus.
Dryandra florabunda, Ceronema dryandrae on, in Australia, III. **503.**
Dryandra nivea, Ceronema dryandrae on, in Australia, III. **503.**
dryandrae, Ceronema.
dryas, Satyrus.
Dryobates pubescens, destroying insects in North America, II. **307**, III. **475.**
Dryobates scalaris bairdi, destroying *Oncideres putator* in U.S.A., III. **475.**
Dryocoetes, on pine and spruce in Canada, I. **407.**
Dryocoetes autographus, on firs in Russia, III. **217.**
Dryocoetes eichoffi, on birch in Russia III. **43.**
dryographus, Xyleborus.
dryope, Eurytela.
Dryophanta (*Diplolepis*) *folii*, on *Quercus pedunculata* in Russia, III. **438.**
Duabanga sonnatioides, Hoplocerambyx spinicornis on, in India, III. **154.**
dubia, Aphelinus; *Chionaspis*; *Exorista*; *Lachnosterna*; *Orgyia.*
dubium, Acyrthosiphon.
dubius, Dyscinetus.
ducens, Feltia.
Ducks, destroying *Polyphylla fullo*, III. **477.**
dudgeoni, Oxycarenus.
dudleyi, Pseudococcus.
Dufour's Mixture, formulae for, II. **309**, III. **604.**
duodecimguttata, Halyzia (*Vibidia*).
duodecimpunctata, Crioceris (*Lema*); *Diabrotica*; *Mylabris.*
Duomitus armstrongi, sp. n., from the Gold Coast, III. **168.**
Duomitus ceramicus, on *Tectona grandis* in India, III. **723.**
Duomitus punctifer, bionomics of, on citrus, etc., in Barbados, II. **533**, III. **73.**
Dumetella carolinensis (Cat Bird), destroying *Cacoecia argyrospila* in U.S.A., I. **226.**
duplana, Rhyacionia (*Evetria*).
duplex, Pseudaonidia.
Durandine, as an insecticide, I. **29.**
Dusty Surface Beetle (see *Opatrum aequale*).
Dutch East Indies, Lepidopterous pests in, III. **644**; (see Java and Sumatra).
Dutch Guiana, cacao pests in, III. **660–662**; *Tomaspis* spp. on grasses in, II. **62.**
Dyera, attacked by *Coptotermes gestroi* in Java, I. **355.**
dynaster, Dibrachiodes.
Dyodiplosis generosi, sp. n., parasite of scale-insects, III. **725.**
Dyscedistes farinatella, bionomics of, on pines in Sweden, III. **147, 292.**
Dyscinetus barbatus, on sugar-cane in the West Indies, I. **253.**
Dyscinetus bidentatus, on sugar-cane and coconut in Br. Guiana, I. **139, 522**, II. **58, 569.**
Dyscinetus dubius, on sugar-cane in Br. Guiana, I. **139.**
Dysdercus (Cotton Stainers), on cotton in E. Africa, II. **580**; destroyed by tick-bird in Jamaica, I. **36**; in Montserrat, I. **329.**
Dysdercus albidipennis, on cotton in Africa, II. **2.**
Dysdercus andreae, on cotton in the West Indies, I. **329**, II. **87**, III. **5.**
Dysdercus cardinalis, on cotton in E. Africa, I. **246, 415**, II. **2, 580.**
Dysdercus cingulatus, on cotton in Bismarck Archipelago, I. **349**; on tobacco in the Far East, II. **490**; on lettuce in Philippines, I. **314.**
Dysdercus delauneyi, on cotton in the West Indies, I. **329**, II. **87**, III. **5.**
Dysdercus fasciatus, on cotton in Africa, I. **246, 415**, II. **2, 447, 580**, III. **125.**
Dysdercus festivus, on cotton in E. Africa, I. **246, 415**, II. **283.**
Dysdercus howardi, in Trinidad, II. **574.**
Dysdercus melanoderes, on cotton in Nigeria, III. **165.**
Dysdercus nigrofasciatus, on cotton in Tropical Africa, I. **49, 246, 415**, II. **2, 59, 278, 447, 580, 592**, III. **165, 752.**
Dysdercus poecilus, on lettuce in the Philippines, I. **314.**
Dysdercus pretiosus, on cotton in Uganda, I. **49**, II. **59, 592**, III. **752.**
Dysdercus ruficollis, on cotton, parasitised by *Acaulona peruviana* in Peru, I. **172.**
Dysdercus sidae, on cotton in the Bismarck Archipelago, I. **349.**

Dysdercus superstitiosus, bionomics of, on cotton in Tropical Africa, I. **92, 246, 415,** II. **2, 106, 580,** III. **125, 165.**
dysodea, Polia.
dysombrias, Eupelmus.
dytiscoides, Eleutheroda.
Dytiscus, not attacked by *Coccobacillus cajae*, I. **167, 336.**

E.

Earias (Cotton Boll Worm), parasites of, in India, III. **144, 345.**
Earias anthophilana (see *E. insulana*).
Earias biplaga, on cotton in Tropical Africa, II. **2, 106, 107, 580,** III. **164.**
Earias chlorana, on willows in Holland, III. **742.**
Earias chlorion (see *E. insulana*).
Earias chromataria, on cotton in Africa, II. **2.**
Earias citrina, on cacao in Nigeria, III. **165, 663.**
Earias fabia, on cotton in Africa, II. **2**; on cotton in the Far East, II. **490.**
Earias frondosana (see *E. insulana*).
Earias gossypii (see *E. insulana*).
Earias insulana (Spiny Boll Worm), bionomics of, on cotton in Tropical Africa, I. **49, 272, 414,** II. **2, 59, 277, 580, 591,** III. **124, 722**; on cotton in the Far East, II. **490**; on cotton in Egypt, I. **92,** II. **3, 20, 321, 324, 325, 505, 507**; parasites of, II. **277, 321, 507.**
Earias ochreimargo (see *E. insulana*).
Earias plaga (see *E. biplaga*).
Earias semifascia (see *E. insulana*).
Earias siliquana (see *E. insulana*).
Earias simillima (see *E. insulana*).
Earias smaragdiana (see *E. insulana*).
Earias tristrigosa (see *E. insulana*).
Earias xanthophila (see *E. insulana*).
earinoides, Microdus (*Bassus*).
Earthworms, destroyed by lime-water, III. **54.**
Earwigs, infested with *Empusa forficulae*, II. **377**; destroying other insects, I. **43, 411,** II. **546, 607**; (see *Forficula*, etc.).
East Indies, *Stephanoderes arecae* in, I. **350**; (see Java, Sumatra, etc.).
ebenina, Anilasta.
ebenus, Ligyrus.
Ebony Tree (*Diospyros ebenum*), *Coccotrypes integer* on, in Ceylon, I. **351.**
Eburia quadrimaculata, distribution of, III. **365.**
eburneus, Dacus (*Tridacus*).
Ecbalium elaterium, Kakothrips robustus on, in France, III. **279.**
Eccoptogaster (see *Scolytus*).
Eccoptopterus sexspinosus (see *Eurydactylus*).
echinocacti, Diaspis.
Echinochloa crus-galli, Diabrotica duodecimpunctata on, in U.S.A., I. **430.**
Echinomyia fera, parasite of *Lymantria dispar* in the Crimea, I. **481.**
echinopus, Cepophagus; *Rhizoglyphus.*
Echinorhynchus gigas, infesting *Lachnosterna* in the U.S.A., II. **122.**
echion, Thecla.
Echium, Phlyctaenodes nudalis on, in Russia, II. **248.**
Echthromorpha fuscator, parasite of Lepidoptera in Hawaii, III. **682.**
Echthromorpha variegata, parasite of *Heteronygmia leucogyna* in Nyasaland, II. **340.**
Eciton schmitti, destroying *Iridomyrmex humilis* in Louisiana, II. **252.**
Economic Entomology, the scope and aims of, II. **395**; importance of, as a subject of education, II. **22**; handbook of, II. **624**; bearing of physiology on, I. **50**; in Germany, I. **108,** III. **239**; organisation of, in Russia, I. **550,** II. **198, 332,** III. **438**; progress and importance of, in U.S.A., I. **108,** III. **42, 349, 353, 421.**
Ecpantheria eridanus, bionomics of, in Porto Rico, III. **517.**
Ecphylus hylesini, parasite of *Scolytus rugulosus* in Russia, I. **536.**
Ectatomma tuberculatum, in the Andes, I. **316.**
Ectobia germanica (see *Phyllodromia*).
Ectoedemia castaneae, on chestnut in Virginia, I. **546,** II. **193.**
Ectoedemia heinrichi, sp. n., on *Quercus palustris* in U.S.A., III. **248.**
Ectoedemia phloeophaga, sp. n., causing chestnut bark disease in U.S.A., II. **193.**
Ectropis bhurmitra, on tea in the Far East, II. **490.**
ectypa, Chaetocnema.
Ecuador, pests of rubber in, I. **351**; pests from, imported into U.S.A., III. **455.**
Edessa meditabunda, on cotton and ground-nuts in St. Vincent, II. **87, 143,** III. **22, 411.**
edusa, Colias.
Eelworms, II. **602,** III. **111**; (see *Heterodera* and *Tylenchus*).

Eelworm, Bulb (see *Tylenchus devastatrix*).
Egg-plant (*Solanum melongena*), *Leucinodes orbonalis* on, in E. Africa, I. **415**; pests of, in Br. Guiana, II. **417**; pests of, in Guam, III. **373**; *Epitrix parvula* on, in Hawaii, II. **630**; pests of, in U.S.A., I. **102, 243**, II. **280, 664**, III. **268, 472**; pests of, in the West Indies, I. **76**, III. **476, 477**; *Acanthocoris fasciculatus* on, in Zanzibar, III. **125**; *Phthorimaea operculella* on, I. **102**, II. **280, 401**; failure to inoculate, with mosaic disease of tobacco, I. **19**.
eggersi, Coccotrypes.
eglanteriae, Rhodites.
eglanterina, Pseudohazis.
egregius, Pteromalus.
egressa, Thereva.
Egypt, Aphids in, III. **748**; control of locusts in, II. **95**, III. **429**; injurious and beneficial mites in, II. **505**; citrus pests and their control in, I. **171, 392**, II. **103, 505, 605**, III. **173**; bionomics and control of cotton pests in, I. **92**, II. **105, 218, 319–322, 324, 325, 507, 508, 596**, III. **72, 167, 505, 752**; miscellaneous pests in, I. **121, 258, 501**, II. **45, 146, 169, 248, 320, 505, 506**, III. **748**.
Egyptian Boll Worm (see *Earias insulana*).
Egyptian Cotton Worm (see *Prodenia litura*).
eichhoffi, Dryocoetes.
Eichhornia crassifer (Water Hyacinth), scale-insects on, in the Seychelles, II. **269, 567**.
einersbergensis, Pteromalus.
Eiphosoma texana, parasite of *Mimorista flavidissimalis* in U.S.A., I. **81**.
Elachertus meridionalis, parasite of *Calpodes ethlius* in Br. Guiana, II. **497, 520**.
Elachista bedellella (see *Aphelosetia*).
elaeagni, Myzus (see *Rhopalosiphum hippophaes*).
Elaeagnus, Rhopalosiphum hippophaes on, in Colorado, III. **351**.
elaeaphilus, Chelonus.
Elaeis guineensis (African Oil Palm), *Pachymerus nucleorum* on, in British Guiana, III. **591**; pests of, in Nigeria, II. **108**, III. **167**; pests of, in the Straits Settlements, II. **99**.
Elaphidion mite (Lime Twig-borer), in West Indies, I. **163, 257**, II. **88**.
Elaphidion parallelum, on oak in Canada, II. **204**.
Elaphidion villosum (Oak Twig-pruner), on oak in Canada and U.S.A. I. **163, 407**, II. **204**, III. **43, 180, 373, 584**.
Elaps corallinus, II. **29**.
Elasmus, parasite of *Eublemma ochrochroa* in Eritrea, III. **433**; parasite of *Scirpophaga intacta* in Java, III. **384**.
Elasmus harnedi, hyper-parasite of *Cirphis* spp. in Texas, III. **684**.
Elasmus margiscutellum, sp. n., from North Queensland, III. **358**.
Elasmus orientalis, sp. n., from North Queensland, III. **358**.
elastica, Apate.
elasticella, Thermopteryx.
Elater, infested with *Empusa carpentieri*, II. **377**; in rotten wood, III. **298**.
Elater nigrinus, in orchards in Br. Columbia, II. **676**.
Elater segetis (see *Agriotes lineatus*).
Elaunon erythrocephalus, on maize in Nigeria, III. **166**.
Eldana saccharina, on maize in Nigeria, III. **166**.
Elder (*Sambucus*), *Clysia ambiguella* on, in Europe, II. **632**, III. **210**; pests of, in U.S.A., I. **3, 325**, II. **704**, III. **270**; not attacked by *Lymantria dispar* in U.S.A., III. **669**; *Aegeria* (*Sesia*) *tipuliformis* on, in France, I. **68**.
Elder, Ground (see *Sambucus ebulus*).
eleabius, Phenacoccus.
eleaphilus, Coccophagus.
electra, Colias.
Electricity, against Aphids, II. **652**; against *Gelechia gossypiella* in cotton seed, II. **320**.
elegans, Chorthippus; *Diversinervus*; *Drasterius*; *Zonocerus.*
elegantior, Aristotelia.
elegantulus, Azotus.
Elenchus melanias, in bait-traps for *Ceratitis capitata*, III. **568**.
Eleodes (False Wireworm), on cereals in U.S.A., II. **537**, III. **298**; parasitised by *Sarcophaga* spp. in U.S.A., III. **452**.
Eleodes omissa var. *borealis*, on fruit in California, I. **385**.
Elettaria major (see Cardamom).
Eleusine coracana, pests of, in India and Ceylon, I. **482**, II. **644**.
Eleusine indica, *Toxoptera graminum* on, in S. Africa, II. **153**; *Cirphis loreyi* on, in Rhodesia, III. **360**.
Eleutheroda dytiscoides, on cypress, etc., in Hawaii, III. **411**.

Elimaea appendiculata, on tobacco in Hawaii, II. 630.
Elis atrata, parasite of *Prepodes vittatus* in Jamaica, I. 165, 253.
Elis (*Myzine*) *sexcincta*, experiments with, in Hawaii, III. 681; parasite of *Lachnosterna*, etc., in U.S.A. and the West Indies, I. 184, 528, II. 48, 121, III. 88.
Ellipsidion pellucidus, attacking *Lepidiota albohirta* in Queensland, III. 751.
ello, Erinnyis (*Dilophonota*).
ellopia, Somniaria.
Elm (*Ulmus*), Aphids on, I. 24, 25, 488, II. 82, 208, 491, 510, 663, 675, III. 200, 226, 351, 421, 515, 541, 552, 697, 718; *Lepidosaphes ulmi* on, in Australia, II. 105; *Vanessa polychloros* on, in Barbary, III. 427; pests of, in Britain, II. 655, III. 660; pests of, in Canada, I. 231, 299, II. 491, 492, 675, III. 43, 515, 552; pests of, in France, II. 195, III. 11, 694; *Scolytus pruni* on, in Germany, II. 485; pests of, in Holland, II. 642, III. 200, 743; *Aulacaspis pentagona* on, in Italy, I. 222; *Tetraneura ulmi* on, in Norway, III. 697; pests of, in Russia, I. 488, II. 36, 45, 82, 314, 331, 714, III. 220, 221, 223, 224, 226, 541, 544, 610; spinning mites on, in Sweden, III. 253; pests of, in U.S.A., I. 3, 24, 116, 225, 425. II. 6, 152, 188, 208, 247, 294, 390, 394, 510, 600, 644, 662, 663, 711, 712, III. 87, 162, 182, 267, 270, 306, 335, 350, 351, 372, 421, 457, 473, 474, 508, 589, 668, 671, 673, 689, 709, 718; (see *Ulmas*).
Elm Bark Beetle (see *Scolytus destructor*).
Elm Bark Louse (see *Gossyparia spuria*).
Elm Borer (see *Saperda tridentata*).
Elm Leaf Beetle (see *Galerucella luteola*).
Elm Leaf Louse, American (see *Eriosoma americanum*).
Elm L af Louse, European (see *Eriosoma ulmi*).
Elm L af-miner (see *Kaliosysphinga ulmi*).
Elm Scale, Brown (see *Eulecanium canadense*).
Elm Weevil (see *Magdalis armicollis*).
Elm Woolly Aphis (see *Eriosoma americanum*).
elocata, Catocala.
elongata, Podonta.
elongatulus, Monophadnus.
elongatum, Nemosoma.
elongatus, Coccus (*Lecanium*); *Tillus*.
elongella, Stenachroia.
elotella, Gracilaria (*Marmara*).
elpenor, Pergesa (*Chaerocampa, Deilephila*).
elutella, Ephestia.
Elydna (*Caradrina*) *reclusa*, on tea in Ceylon, I. 88; on maize in the Far East, II. 489; on tobacco in Hawaii and Fiji, II. 629.
elyi, Polychaetoneura.
Elymus, Aphids on, in U.S.A., II. 696, III. 351.
Elymus canadensis, Prosopothrips cognatus on, in U.S.A., III. 577.
Elymus virginicus, Prosopothrips cognatus on, in U.S.A., III. 577.
emarginatus, Ips.
embryophagus, Encyrtus; *Trichogramma* (see *T. fasciatum*).
emelianovi, Acyrthosiphon.
emigratella, Amorbia.
emmedonia, Nephelodes.
Emphytus calceatus, in France, II. 610.
Emphytus canadensis (see *Hoplocampa*).
Emphytus cinctus, in Holland, III. 743; on roses in Russia, II. 720.
Emphytus cingulatus, on strawberry in Russia, III. 389.
Emphytus fulvipes (see *E. truncatus*).
Emphytus grossulariae, on gooseberry in France, II. 622; on currants in Russia, III. 401.
Emphytus rufocinctus, on roses in Russia, II. 720, III. 105, 443.
Emphytus truncatus, in the Crimea, III. 613.
Empicoris variolosus, bionomics of, on *Hevea brasiliensis* in Br. Guiana, II. 55, 497, 520, 569.
Empidonax, destroying *Diabrotica duodecimpunctata* in U.S.A. I. 431.
Empoa rosae (Rose Leaf-hopper), bionomics of, in U.S.A., III. 270.
Empoasca, on willows in Maine, III. 530; in Manitoba, III. 70.
Empoasca flavescens, on tea in India, III. 489.
Empoasca mali (Apple Leaf-hopper), bionomics of, on apples and lucerne in Canada and U.S.A., I. 90, 182, 280, II. 245, 288, 648, 675, 677, III. 161, 530, 552, 724; on cucumber in Porto Rico, III. 476; disseminating fire-blight, II. 288.
Empoasca rosae, parasitised by *Anagrus armatus* in U.S.A., III. 724.
Empria fragariae, sp. n., on strawberry in Iowa, III. 136.

Empusa, infesting insects, II. **269**; infesting Aphids in England, III. **660**; infesting *Laphygma frugiperda* in Porto Rico, II. **49**; infesting *Dendrolimus pini* in Russia, II. **222**; infesting *Tomaspis* in Trinidad, I. **184**, II. **62**; infesting insects in U.S.A., II. **282**, III. **131**, **463**.
Empusa aphidis, infesting Aphids in U.S.A., III. **115**.
Empusa (*Entomophthora*) *aulicae*, (Brown-tail Fungus), infesting *Arctia caja*, I. **166**, **250**, II. **229**, **310**, **362**, **376**, **421**; infesting *Lymantria dispar* and *Euproctis chrysorrhoea*, II. **376**, **394**, III. **136**; distinct from *E. grylli*, II. **376**.
Empusa freseni, infesting Aphids, II. **376**, III. **246**.
Empusa (*Entomophthora*) *grylli* (Locust Fungus), I. **67**, **412**, **535**, **544**, II. **95**, **126**, **376**, **718**, III. **41**, **466**, **498**; distinct from *E. aulicae*, II. **376**; failure of, against locusts, III. **41**; infesting *Draeculacephala mollipes* in U.S.A., III. **577**.
Empusa lageniformis, infesting Aphids, II. **376**.
Empusa muscae, infesting Muscid and Syrphid flies, II. **376**; infesting *Phytometra gamma*, III. **542**.
Empusa ovispora, infesting Diptera, II. **376**.
Empusa planchoniana, infesting Aphids, II. **376**.
Empusa plusiae, infesting *Phytometra* spp., II. **376**, III. **542**.
Emys orbicularis, destroying *Locusta migratoria* in Russia, III. **603**.
Enaria melanictera, on cotton in Africa, II. **1**, **2**.
Enarmonia batrachopa (False Codling Moth), on acorns and citrus in S. Africa, II. **596**, **654**, **655**.
Enarmonia diniana (*Steganoptyca pinicolana*), on larch in N. Italy, III. **124**, **382**.
Enarmonia minutana, on chrysanthemums in England and France, II. **131**, III. **747**.
Enarmonia (*Grapholitha*, *Epinotia*) *nanana*, on Conifers in Norway and Sweden, III. **291**, **696**.
Enarmonia prunivora (Lesser Apple Worm), in orchards in Canada, I. **48**, **90**, **404**, **413**, II. **675**, **676**; in orchards in U.S.A., I. **282**, **290**, II **458**; woolly aphis attacked by, in U.S.A., I. **26**; experimentally parasitised by *Calliephialtes messor*, II. **138**.
Enarmonia (*Grapholitha*) *rufimitrana*, on silver fir in Russia, III. **223**.
Enarmonia wōberiana, on apricots in Algeria, III. **739**; on cherries in Holland, III. **741**.
Encarsia parvella, sp. n., parasite of Aleurodids in Nigeria, III. **433**.
Encarsia siphonini, sp. n., parasite of *Siphoninus finitimus* in Eritrea, III. **433**.
Encephalartus, *Phenacoccus obtusus* on, in E. Africa, II. **429**.
Enchenopa binotata, bionomics of in U.S.A., III. **572**.
Enchytraeus albidus, on celery in Ireland, II. **8**.
Encyrtonotus notabilis, sp. n., in Eritrea, III. **433**.
Encyrtus, parasite of *Aphis rumicis* (*euonymi*), II. **620**; hyper-parasite of *Eurygaster integriceps* in Russia, III. **401**.
Encyrtus aphidivorus, parasite of Aphids in Russia, II. **79**, III. **308**.
Encyrtus bogoriensis, parasite of *Coccus viridis* in Java, III. **647**.
Encyrtus embryophagus, parasite of *Cydia pomonella* in Russia, I. **366**.
Encyrtus flavus, parasite of *Coccus viridis* in Ceylon, III. **647**.
Encyrtus fuscicollis, parasite of *Hyponomeuta malviellus* in U.S.A., I. **16**.
Encyrtus fuscus, imported into Hawaii, III. **757**; in bait-traps for *Ceratitis capitata*, III. **568**.
Encyrtus tachardiae, parasite of *Tachardia albizziae* in India, I. **275**.
Encyrtus telenomicida, hyper-parasite of *Carpocoris purpureipennis* etc., in Russia, I. **449**, II. **358**, III. **220**.
Endaphis, preying on Eriophyidae, III. **134**.
Endive, *Phytomyza geniculata* on, II. **425**.
Endrosis lactella, in stored beans in France, II. **622**.
engelmanni, *Dendroctonus*.
England (see British Isles).
English Elm Pouch Gall (see *Tetraneura ulmisacculi*).
engstroemi, *Haltica*.
Enicmus minutus, in flour in Russia, II. **40**.
Ennomos quercinaria, in Russia, III. **400**.
ensifer, *Coccidencyrtus*.
ensiger, *Conocephalus*.
ensirostris, *Sphenophorus*.
Entedon agrilorum, parasite of *Agrilus chrysoderes* in France, II. **621**.

Entedon arcuatus, parasite of *Coleophora laricella* in Europe, I. 63.
Entedon epigonus, parasite of *Mayetiola destructor*, I. 528, II. 225.
Entedon laricinellae, parasite of *Coleophora laricella* in Europe, I. 63.
Entedon thomsoni, parasite of *Agromyza angulata* in Indiana, II. 288.
Entedononecremnus unicus, sp. n., parasite of *Aleurochiton* in Br. Guiana, III. 724.
Entephria sexpunctalis, on *Funtumia* in Nigeria, III. 166.
Entomological Appointments, notices of, II. 56, 407, III. 56, 216.
Entomophthora, controlling *Corynothrips* in Trinidad, III. 367; failure of, against locusts, III. 24.
Entomophthora anisopliae (see *Metarrhizium*).
Entomophthora aulicae (see *Empusa*).
Entomophthora aphidis, infesting Aphids, II. 377, 563; infesting *Blissus leucoptera*, II. 227.
Entomophthora apiculata, infesting Lepidoptera, II. 377.
Entomophthora arrenoctona, infesting *Tipula paludosa*, II. 376.
Entomophthora calliphorae (see *E. muscivora*).
Entomophthora calopteni (see *Empusa grylli*).
Entomophthora carpentieri, infesting Elaterids, II. 377.
Entomophthora conica, infesting *Chironomus*, II. 377.
Entomophthora culicis, infesting mosquitos, II. 377.
Entomophthora dipterigena, infesting Tipulidae, II. 377.
Entomophthora forficulae, infesting earwigs, II. 377.
Entomophthora geometralis, infesting Lepidoptera, II. 377.
Entomophthora gracilis, infesting mosquitos, II. 377.
Entomophthora grylli (see *Empusa*).
Entomophthora montana, infesting *Chironomus*, II. 377.
Entomophthora muscivora, infesting *Calliphora*, II. 376.
Entomophthora occidentalis, infesting Aphids, II. 377.
Entomophthora phytonomi (see *E. sphaerosperma*).
Entomophthora radicans (see *E. sphaerosperma*).
Entomophthora saccharina, infesting Lepidoptera, II. 377.
Entomophthora scatophagae, infesting *Scatophaga merdaria*, II. 377.
Entomophthora sepulchralis, infesting Tipulidae, II. 377.
Entomophthora sphaerosperma, infesting *Hypera* spp., II. 376, 577, 600; infesting *Plutella maculipennis* in Denmark, III. 698.
Entomophthora variabilis, infesting mosquitos, II. 377.
Entomophthora virescens, infesting Lepidoptera, II. 377.
Entomoscelis adonidis (Red Turnip Beetle), bionomics of, in Canada, I. 412, II. 677, III. 70; on turnips in France, I. 504; on mustard, etc., in Russia, I. 395, 396, 487, II. 43, 355, 356, 357, 467, III. 112, 221, 227, 399, 637.
Entomoscelis dorsalis (see *E. sacra*).
Entomoscelis sacra, on mustard, etc., in Russia, I. 487, II. 467, III. 221, 399.
Epacris impressa, *Lecaniodiaspis microcribraria* on, in Australia, III. 751.
Epacromia dorsalis, injuring crops in India, II. 138.
Epacromia strepens, *Coccobacillus* infections in, I. 336.
Epacromia thalassinus (see *Aeolopus*).
Epacromia viridis (see *Aeolopus*).
Epeira angulata, attacking bees in Russia, II. 64.
Epeira cormuta, attacking bees in Russia, II. 64.
Epeira diadema, attacking bees in Russia, II. 64.
Epeira domiciliorum, predaceous on *Gargaphia solani* in U.S.A., III. 576.
Epeira patagiata, attacking bees in Russia, II. 64.
Epeira sclopetaria, attacking bees in Russia, II. 65.
Epelis truncataria var. *faxonii* (Cranberry Spanworm), parasitised by *Campoplex* in U.S.A., III. 531.
Epepeotes luscus, bionomics of, on rubber in Java, II. 534, 535.
Epepeotes meridianus, bionomics of, on rubber in Java, II. 534, 535.
Epermenia choerophyllella, on parsnips in France, I. 504.
Ephedra californica, *Pseudococcus ephedrae* on, in California, II. 435.
Ephedrus incompletus, parasite of *Macrosiphum rosae*, in U.S.A., II. 527.
Ephedrus lacertosus, parasite of *Rhopalosiphum ribis* in Russia, II. 81.
ephemeraeformis, *Thyridopteryx*.
Ephestia cahiritella (see *E. cautella*).
Ephestia calidella, in dried figs, I. 313.

Ephestia cautella, damaging biscuits I. 292, 294, 330; on cotton in Africa, II. 2; on maize and cotton in E. Africa, I. 415, II. 580; in dried fruits in California, III. 575; bionomics of, in dates in Egypt, II. 321; destroying *Coccus viridis* in Java, III. 647; in stored maize in Nigeria, III. 166.
Ephestia elutella (Chocolate Moth), distribution of, on cacao, III. 662; in ground-nut cakes in France, III. 382; parasite of, in Hawaii, III. 681; infesting dry tobacco in Russia, III. 613; on *Arachis hypogaea* in Senegal, III. 726; infesting biscuits, I. 292, 294, 330.
Ephestia figuliella, in maize in E. Africa, I. 415.
Ephestia gnidiella (see *Cryptoblabes*).
Ephestia interpunctella (see *Plodia*).
Ephestia kühniella (Mediterranean Flour Moth), in Scotland, I. 387; in stored cereals in Canada and U.S.A., I. 114, II. 93, 492, 537, III. 175; damaging biscuits, I. 292, 293, 294, II. 235; parasites of, I. 294; effect of carbon bisulphide on, I. 86.
ephestia, Amorphota.
Ephialtes, parasite of *Cydia pomonella*, I. 365.
Ephialtes carbonarius (see *Calliephialtes messor*).
ephippiella, Argyresthia.
Ephippiger biterrensis, on vines in France, II. 609, III. 188.
Ephippiger ephippiger, on vines in France, III. 188; on vines in Italy, III. 113.
Ephippiger vitium (see *E. ephippiger*).
Ephippigera rugosicollis (see *Uromenus*).
ephippium, Phytoecia.
Ephydra macellaria, on rice in Egypt, I. 501.
Epiblema tedella (see *Eucosma*).
Epicaerus ravidus, I. 165.
Epicauta (Blister Beetles), on tomatoes in Florida, III. 179; on rice in India, II. 67.
Epicauta ambusta, probably parasitic on small Acridians in Russia, II. 475.
Epicauta cinerea, on clematis in North Carolina, I. 243; on potatoes in Quebec, I. 301; on lucerne in U.S.A., III. 708.
Epicauta erythrocephala, on potatoes in Russia, III. 46, 221; infesting eggs of locusts in Russia, I. 485, 535, II. 53, 73, 356, 475, III. 399, 537.
Epicauta latelineolata, infesting eggs of locusts, II. 716.
Epicauta maculata (Spotted Blister Beetle), on potatoes in Montana, II. 537.
Epicauta marginata, on potatoes, etc., in North Carolina, I. 243; attacked by *Lasius niger americanus*, III. 136.
Epicauta megalocephala, infesting egg-clusters of locusts, II. 475.
Epicauta pennsylvanica, on potatoes in Canada, I. 301, III. 507.
Epicauta sibirica, infesting egg-clusters of locusts, II. 475.
Epicauta vittata, on potatoes in New Jersey, III. 193, 547; attacked by *Lasius niger americanus*, III. 136.
Epicerchysius xanthipes, sp. n., bred from cotton-bolls in U.S.A., III. 724.
Epicometis, effect of colours on, III. 341.
Epicometis (*Tropinota*) *hirta*, on vines in Algeria, II. 446; on fruit in France, II. 448; on vines in Italy, III. 112; bionomics and control of, in Russia, I. 357, 395, 398, 437, 460, 491, 527, 531, 532, 536, 539, II. 42, 43, 44, 110, 172, 260, 261, 374, 468, 627, 718, III. 41, 47, 51, 183, 222, 225, 242, 341, 393, 399, 402, 431, 477, 538, 540, 601, 607, 610, 641.
Epicometis hirtella (see *E. hirta*).
Epicometis (*Tropinota*) *turanica*, bionomics of, in Russia, I. 437, 438, II. 483, 714.
Epidiaspis piricola (*Diaspis fallax* and *D. ostreaeformis*), on *Heteromelea arbutifolia* in California, II. 553; in Chile, I. 138; in France, II. 166; on apple and pear in Italy, III. 124; on fruit trees in Turkestan, II. 636; imported into U.S.A., from France, III. 455; anatomy of, II. 343; linseed oil against, I. 363.
Epidinocarsis pseudococci, sp. n., parasite of *Pseudococcus citri* in Sicily, III. 633.
epigonus, Entedon.
Epilachna borealis, on Cucurbitaceae in U.S.A., I. 419.
Epilachna canina, on *Sesamum* in E. Africa, I. 414.
Epilachna chrysomelina, on Cucurbitaceae in E. Africa, I. 246, 414; on vegetable marrow in France, I. 504; on cotton in Nigeria, II. 106; on Cucurbitaceae in Russia, II. 716; predaceous on *Aphis gossypii* in Uganda, II. 592.
Epilachna corrupta, in Arizona, I. 180.

Epilachna dregei, on vegetables in Nyasaland, II. 278; on potatoes in S. Rhodesia, II. 162.
Epilachna fulvosignata, on maize in E. Africa, I. 414.
Epilachna globosa, in Russia, I. 359.
Epilachna hirta, on vetegables in Nyasaland, II. 278; in Rhodesia, II. 162.
Epilachna matronula, on cotton and maize in E. Africa, I. 414, II. 579.
Epilachna paykulli, on vegetables in Nyasaland, II. 278.
Epilachna polymorpha, on cotton and maize in E. Africa, I. 414, II. 579.
Epilachna similis, said to destroy *Coccus viridis* in Africa, III. 647; on cotton and maize in E. Africa, I. 247, 414, II. 579; on cotton in S. Nigeria, II. 106.
Epilachna vigintioctopunctata, on vegetables in Japan, I. 520; on tomatoes in the Philippines, I. 157; on Cucurbitaceous plants in Queensland, II. 19.
epilinana, Phalonia (*Conchylis*).
Epilobium, Cacoecia costana on, in France, I. 221; probably not a food-plant of *Acyrthosiphon pisi* in Russia, III. 704.
Epilobium angustifolium, Haltica oleracea on, in Russia, III. 538.
Epilobium spicatum, Aphis rumicis (*eunoymi*) on, in France, II. 621.
Epinotia nanana (see *Enarmonia*).
Epinotia piceafoliana, on spruce in Maine, I. 141; parasites of, I. 200.
Epipedosoma laticolle, on cotton in Africa, I. 414, II. 2, 580.
Epiphyllum (Lobster Cactus), *Pseudococcus adonidum* on, in California, II. 436.
Episema (*Diloba*) *coeruleocephala*, bionomics of, in orchards in Russia, III. 204, 225, 403, 639.
Episilia festiva, on lettuce in France, I. 504.
Episilia (*Agrotis*) *simulans*, food-plants of, in Russia, III. 543, 639.
Epithectis nigricostella, on lucerne in Europe, I. 527.
epitricis, Perilitus.
Epitrimerus armatus, on *Crataegus oxyacantha* in Britain, I. 237.
Epitrimerus malinus, on apples in Britain, I. 237.
Epitrimerus pyri (Pear-leaf Russet Mite), on pear and peach in California, II. 707, III. 690; on pears in Switzerland, I. 336.
Epitrimerus vitis, on vines in Europe, I. 468, 469.
Epitrix cucumeris (Potato Flea-Beetle), bionomics of, on potatoes etc., in Canada and U.S.A., I. 202, 299, 476, II. 301, 664, 677, III. 193, 472, 547; on egg-plant and tomato in Porto Rico, III. 477.
Epitrix fuscula, on potatoes in New Jersey, III. 547; trap for, III. 452.
Epitrix parvula (Tobacco Flea-Beetle), food-plants of, in California, III. 85; food-plants of, in Hawaii, II. 630.
Epitrix subcrinita (Western Potato Flea-Beetle), food-plants of, in Br. Columbia, II. 676; on potato in Oregon, I. 135, II. 160.
Epiurus indagator var. *nigrifrons*, parasite of *Polychrosis viteana* in U.S.A., I. 113.
Epiurus innominatus, parasite of *Tortrix fumiferana* in Canada, I. 202.
epius, Spalgis.
Epochra canadensis (Currant Fruit-fly), bionomics and control of, in Canada and U.S.A., I. 132, 413, II. 380, 537, 675, 677, III. 30, 335.
equalis, Macrocentrus.
equestre, Dorcadion.
equestris, Clinodiplosis; *Lygaeus* (*Spilostethus*); *Merodon.*
equi, Gastrophilus.
equivalens, Nepheles.
Eragrostis, Colopha ulmicola on, in Colorado, III. 351.
Erechtites arguta, Deilemera annulata on, in New Zealand, III. 721.
Eremias, destroying locust-eggs in Turkestan, II. 509.
eremita, Osmoderma.
eremitum, Isosoma.
erithraeus, Ceroplastes.
Eremnus, on strawberries in S. Africa, II. 299.
Eremnus fulleri, sp. n., on maize in Orange Free State, III. 167.
Eremobia muricata (see *Tmethis*).
Eremophila sturtii, Aspidiotus coralinus on, in New South Wales, II. 324.
Erethistes lateralis, on bamboo in Brazil, III. 306, 696.
Erethistes lateralis var. *catharinensis*, nov., on bamboo in Brazil, III. 696.
Eretmocerus diversiciliatus, parasite of Aleurodids in Nigeria, III. 433.
Ereunetis flavistriata (Sugar-cane Bud-moth), on sugar-cane in Hawaii, III. 364; parasites of, III. 681.
Ergates faber, in timber in Saxony, I. 373.

Ergates spiculatus, in Coniferous logs in U.S.A., III. 579.
Ergolis ariadne, on cotton in the Far East, II. 490.
Ergolis medione, on *Ricinus communis* in India, II. 487.
Ergot, *Lasioderma serricorne* breeding in, in the Philippines, I. 170.
Eri Silkworm (see *Attacus ricini*).
Erica cinerea, *Eriococcus devoniensis* on, in Britain, III. 753.
ericae, *Nysius*.
erichsoni, *Lygaeonematus* (*Nematus*).
eridania, *Xylomyges* (*Prodenia*).
eridanus, *Ecpantheria*.
Erigeron annuus (White-top Fleabane), *Crambus caliginosellus* on, in Virginia, II. 525.
Erigeron canadense, food-plant of pests in U.S.A., I. 182, II. 674.
Erigeron ramosus (Daisy Flea-bane), *Lygus pratensis* on, in Canada, II. 593.
erineus, *Eriophyes tristriatus*.
Erinnyis (*Dilophonota*) *ello* (Cassava Hawk Moth), in Colorado, III. 90; on rubber in Br. Guiana, I. 139, II. 568, 569; on cassava in the West Indies, I. 258, II. 533, III. 367; natural enemies of, II. 533, 568, III. 367.
Eriobotrya japonica (see Loquat).
Eriocampa (see *Eriocampoides*).
Eriocampoides, new parasites of, in U.S.A., III. 658.
Eriocampoides adumbrata (see *E. limacina*).
Eriocampoides aethiops, on roses in Holland, I. 386, II. 641, III. 743.
Eriocampoides annulipes, on roses in Holland, III. 743; on apples in Russia, III. 606.
Eriocampoides cerasi (see *E. limacina*).
Eriocampoides limacina (Cherry Slug, Pear Slug), control of, in Australia, II. 584, III. 78, 97, 410, 492, 527; on fruit trees in Canada, I. 401, 413, II. 665, 677, III. 408, 551; on fruit trees in France, II. 421, 478; on roses in Holland, III. 743; in New Zealand, II. 576; on fruit trees in Russia, I. 460, 488, 497, 536, II. 36, 330, 370, 442, 700, III 20, 47, 204, 222, 223, 225, 393, 399, 401, 481, 601, 604, 641; on fruit trees in U.S.A., I. 131, 176, 283, 405, 467, II. 245, 599, 710, III. 180, 372, 494, 691; measures against, I. 176, II. 387, 700, 710, III. 78, 97, 180, 223, 408.
eriocampoides, *Homalomma*.
eriocampoidis, *Trematopygus*.
Eriococcus, on cotton in E. Africa, II. 581.
Eriococcus adenostomae, on *Adenostoma fasciculatum* in California, II. 553.
Eriococcus araucariae, in S. Africa, III. 502.
Eriococcus cockerelli, on *Cinchona* in Mexico, II. 138.
Eriococcus devoniensis, on *Erica cinerea* in Britain, III. 753.
Eriococcus festucae, sp. n., on *Festuca parvigluma* in Japan, III. 127.
Eriococcus greeni, on *Agrostis* in Britain, III. 753.
Eriococcus inermis, sp. n., on heath in Britain, III. 753.
Eriococcus insignis, on *Agrostis* in Britain, III. 753.
Eriococcus lagerstroemiae, in Britain, III. 753.
Eriococcus serratilobis, sp. n., on *Eucalyptus gracilis* in Australia, III. 548.
Eriococcus serratilobis prominens, subsp. n., in Australia, III. 548.
Eriodendron anfractuosum (*Bombax ceiba*) (Silk Cotton Tree, Kapok), pests of, in E. Africa, I. 414, II. 146; *Sahlbergella* spp. on, in the Gold Coast, III. 528; pests of, in Java, I. 355, II. 535, III. 312, 661; pests of, in S. Nigeria, II. 106, 276; *Stirastoma depressum* on, III. 660; *Dysdercus superstitiosus* on, in Zanzibar, III. 125.
Eriodictyon californicum (Mountain Balm), *Pseudococcus yerba-santae* on, in California, I. 307, II. 436.
Eriogaster (*Lasiocampa*) *lanestris*, I. 50; in Astrachan, III. 221.
Eriogonum latifolium, *Pseudococcus maritimus* on, in California, II. 436.
Erionota thrax, on banana and coconut in the Far East, II. 490; on coconut in Malay States, III. 323.
Eriopeltis coloradensis, parasitised by *Leucopis nigricornis* in U.S.A., I. 392.
Eriopeltis festucae, parasitised by *Eunotus americanus* in U.S.A., III. 724.
Eriophyes (*Phytoptus*) (Blister Mite), in orchards, etc., in Russia, II. 700, III. 207, 477; on Arizona wild cotton, II. 272.
Eriophyes avellanae (Filbert Bud Mite), in Oregon, III. 262.
Eriophyes brevipunctatus, on elms in Russia, III. 610.
Eriophyes calacladophora, on tomatoes in Florida, III. 178.

Eriophyes carinatus (Ribbed Tea Mite), on tea in India and Ceylon, II. 152.
Eriophyes coryli, on *Corylus* on Russia, II. 672.
Eriophyes gossypii (Cotton-leaf Blister Mite), on cotton in the West Indies, I. 98, 263, II. 87, 142, 531, 533, III. 302.
Eriophyes lactucae, on lettuce in France, I. 504.
Eriophyes macrorhynchus, on maple in Germany, II. 501.
Eriophyes mali, on plums in Russia, III. 393.
Eriophyes malifoliae, on apples in British Columbia, II. 676.
Eriophyes oleivorus (Silver Mite), on citrus in Florida and California, I. 188, III. 444, 622.
Eriophyes padi (Plum Gall Mite), on plums in Montana, II. 536, III. 335; on plums in Russia, III. 610.
Eriophyes pini var. *floricola*, on *Abies concolor* in Russia, III. 224.
Eriophyes plicator, on lucerne in Europe, I. 527.
Eriophyes plicator trifolii, on lentils, I. 123.
Eriophes pyri (Pear-leaf Blister Mite), on fruit in Australia, III. 492; control of, in Britain, II. 498, III. 95; bionomics and control of, in Canada and U.S.A., I. 47, 90, 282, 405, 413, II. 388, 536, 563, 676, 677, 709, III. 261, 334, 493, 515, 566; on fruit trees in France, III. 496; in Germany, II. 500; on fruit in Holland, III. 201; on pear in Italy, III. 124; on apple and pear in Norway, III. 108; in orchards in Russia, I. 357, 493, 539, II. 43, 45, 442, 514, 715, III. 44, 106, 219, 223, 226, 393, 398, 401, 602, 610; bionomics of, on pears in Tasmania, III. 362.
Eriophyes quadripedes, on silver maple in New Jersey, III. 515.
Eriophyes quadrisetus juniperus, on juniper berries in U.S.A., III. 580.
Eriophyes quadrisetus typicus, on juniper in U.S.A., III. 580.
Eriophyes ribis (Currant Gall Mite), in Canada, III. 677; bionomics and control of, on currants in England, I. 139, III. 303, 304, 676; bionomics and control of, in Germany, II. 296; on black currant, etc., in Holland, III. 201, 740; bionomics of, in Russia, II. 513, 514, III. 393, 399, 401, 540.
Eriophyes scaber, on *Ribes alpinum* in Russia, III. 224.
Eriophyes similis, on plums in Russia, III. 610.
Eriophyes tenuis, on oats in France, III. 428.
Eriophyes theae, on tea in India, III. 490.
Eriophyes tiliae var. *leiosoma*, on lime in Scotland, II. 499.
Eriophyes tristriatus, on walnut in Bessarabia, III. 226.
Eriophyes tristriatus var. *erineus* (Walnut Leaf Mite), on walnut in Scotland, II. 498; bionomics of, in Oregon, III. 261.
Eriophyes unguiculatus, on box in Holland, III. 201.
Eriophyes violae, control of, in Holland, III. 202.
Eriophyes vitis (Vine Leaf Mite), hot water effective against, III. 522; on vines in Germany, I. 468, II. 499; on vines in Italy, III. 113, 124; bionomics of, in Oregon, III. 261; bionomics and control of, on vines and plums in Russia, II. 43, 355, 638, 715, III. 44, 219, 226, 393, 398, 477, 478, 538, 602, 701.
Eriopus (*Callopistria*) *floridensis* (Florida Fern Caterpillar), bionomics of, in U.S.A., II. 92, III. 354.
Eriosoma americanum (American Elm-leaf Aphis), on elm in North America, I. 24, II. 152, 208, 491, 675, III. 351, 584, 689, 718.
Eriosoma crataegi, on *Crataegus* in Colorado, III. 351; migration of, III. 718.
Eriosoma fodiens (see *E. ulmi*).
Eriosoma grossulariae, on currants in Germany, II. 500; on *Ribes* in Russia, II. 79.
Eriosoma lanigerum (Woolly Apple Aphis), introduced into Africa, II. 163, 197, 276, 570, III. 502; in orchards in Australia, II. 584, III. 97, 408; in Belgium, II. 177; control of, in Britain, I. 433, II. 8, 563, III. 659, 676; intercepted on apples in California, III. 626; bionomics and control of, in Canada, I. 83, 90, 405, 413, II. 94, 491, 675, III. 19, 552; legislation against, in Canada, I. 84, II. 208, III. 9, 71; in orchards in France, II. 420, III. 170; bionomics of, in Germany, II. 500, III. 387; imported into Ireland from America, I. 332; control of, in Italy, I. 161, 230, III. 124, 429; in Japan, I. 520, II. 246; measures against, in New Zealand, III. 158; in orchards

in Russia, II. 76, 79, 317, 514, 701, 715, III. 45, 76, 112, 224, 226, 395, 396, 538, 607, 609; in Tasmania, II. 604, III. 362; legislation against, in Tennessee, III. 657; bionomics of, in U.S.A., I. 24–26, 180, 280, 451, 512, II. 4, 119, 707, III. 161, 192, 351, 415, 421, 423, 446, 494, 515, 708, 718, 738; measures against, I. 161, 235, 274, 376, 433, 452, 475, II. 22, 77, 234, 246, 293, 317, 387, 498, 501, 570, 584, 604, 701, III. 158, 170, 362, 387, 395, 396, 429, 436, 529, 538, 609, 659; fungi infesting, I. 316; destroyed by tits, II. 229; structure and biology of, I. 160, II. 152.

Eriosoma lanuginosum, on elm in Russia, III. 223, 226; *E. pyri* said to be female of, II. 406.

Eriosoma (*Tetraneura*) *pallidum*, bionomics of, in Holland, III. 200.

Eriosoma populi, II. 634.

Eriosoma pyri, on *Pyrus* in Russia, II. 79; said to be female of *E. lanuginosum*, II. 406.

Eriosoma rileyi, bionomics of, in Canada and U.S.A., II. 208, 491, III. 351, 718.

Eriosoma ulmi (European Elm-leaf Aphis), II. 4; not occurring in America, II. 510; on elm in Canada, III. 552; on currants in England, III. 277; food-plants of, in Europe, II. 152, 406, 510, III. 718; on *Ribes* in Russia, II. 82, III. 45; on *Ribes* in U.S.A., II. 208; said to be a synonym of *E. grossulariae*, II. 500.

Eritrea, new Chrysomelids and Coccinellids from, III. 431; new Coccids from, II. 346; *Dacus longistylus* from, III. 748; olive pests in, II. 346, III. 431–433; olive fly parasites in, III. 173, 431–433; plant protection regulations in, III. 113.

Erium, on citrus in India, I. 279.

Ermine Moths (see *Hyponomeuta*).

Ernobius abietis, in Sweden, II. 243.

Ernobius mollis, in larch timber in Britain, III. 677; bionomics of, in Sweden, III. 255.

erosa, Anomis (*Cosmophila*); *Malacosoma*; *Tegrodera*.

Erotolepsiella bifasciata, sp. n., from North Queensland, III. 358.

errans, Dimorphopteryx.

erratica, Notostira.

erucae, Haltica.

erucoides, Diplotaxis.

eruditus, Cheyletus; *Hypothenemus*.

ervi, Aphidius; *Apion*; *Asphondylia*.

Eryngium, Adelphocoris lineolatus on, in Russia, II. 425.

Eryngium campestre, Dociostaurus maroccanus on, in Sicily, III. 39.

Erynnia nitida, parasite of *Galerucella luteola* in Europe, III. 252.

Erynnia (*Parerynnia*) *vibrissata*, parasite of Lepidoptera in France, I. 315, 419.

erysimi, Aphis.

Erysimum charanthoides, Phyllotreta nemorum on, in Russia, I. 211.

Erythea edulis (Guadaloupe Island Palm), *Pseudococcus citri* on, in California, II. 435.

erythraea, Achrysocharis formosa.

Erythraeus, predaceous on *Agromyza pusilla* in U.S.A., II. 46; predaceous on *Stictocephala festina* in U.S.A., III. 334.

erythraeus, Aphelinus.

Erythrina (Immortel), *Franklinothrips insularis* on, in Trinidad, III. 468.

Erythrina indica (Coral Tree, Dadap), pests of, in Ceylon, II. 643, 644, III. 61, 157, 168; pests of, in Java, II. 534, 535, III. 314, 713.

Erythrina lithosperma, Pseudococcus bicaudatus on, in Java, III. 648.

Erythrina umbrosa, Schistocerca paranensis on, in Trinidad, III. 679.

Erythrobata punctipennis, on rubber in East Africa, II. 415.

erythrocephala, Epicauta.

erythrocephalus, Elaunon; *Piocoris*.

Erythrocera pomoriorum (see *Prosopaea fugax*).

erythrogaster, Cinxaelotus.

erythromelas, Vanessa polychloros.

erythropasa, Pinipestis.

erythrophthalmus, Geniocerus.

Erythropus vespertinus, destroying *Dendrolimus pini* in Russia, II. 222.

Erythroxylon, Zeuzera coffeae on, in Ceylon, II. 151.

Erythroxlyon coca (see Coca).

erythrura, Sarcophaga.

esenbeckii, Rhogas.

Estigmene acraea, in U.S.A., III. 85, 513.

esuriens, Diaprepes (*Exophthalmus*).

Ethane Tetrachloride, against *Phylloxera*, II. 518.

Ether, ineffective as an insecticide, III. 285.

ethlius, Calpodes.

Ethmia (*Psecadia*) *pusiella*, in Astrachan, III. 220.

Euarthrus sodalis, predaceous on *Blissus leucoptera* in U.S.A., II. 227.

Eubazus macrocephalus, parasite of *Apion apricans* in Russia, II. **340.**
Eublemma, destroying *Coccus viridis* in Java, III. **647**; destroying *Tachardia aurantiaca* in Java, I. **150.**
Eublemma costimacula, destroying *Stictococcus dimorphus* in Uganda, II. **59**, III. **289, 752.**
Eublemma ochrochroa, destroying Coccids in Nigeria, II. **203**, III. **165, 433.**
Eublemma olivacea, in India, III. **145.**
Eublemma (*Thalpochares*) *scitula*, destroying *Ceroplastes rusci* in France, III. **11**; destroying *Stictococcus dimorphus* in Nigeria, III. **165.**
Eubolia arenacearia, on lucerne in Russia, II. **262, 715.**
Eubotrys, not attacked by *Lymantria dispar* in U.S.A., III. **669.**
Eubussea dilatata, on coconut in the South Sea Islands, II. **2.**
Eucactophagus graphipterus, on orchards in New Jersey, III. **354.**
Eucallipterus arundicolens, on bamboo in California, II. **251.**
Eucallipterus flavus, on *Alnus rhombifolia* in California, III. **686.**
Eucalymnatus perforatus, intercepted on Kentia palms in California, III. **420.**
Eucalymnatus tessellatus (Tessellated Shield Scale), on coconut in St. Vincent, II. **143**; bionomics of, in the Seychelles, I. **129, 474**, II. **269, 566, 567.**
eucalypti, *Antheraea*; *Ctenochiton*; *Lepidosaphes*; *Rhinocola.*
Eucalyptus, pests of, in Australia, II. **128, 324, 427, 493**, III. **366, 491, 548, 751**; *Orgyia postica* on, in Ceylon, III. **61**; not attacked by *Pseudococcus filamentosus* in E. Africa, II. **146**; *Chrysomphalus aonidum* on, in Egypt, II. **605**; attacked by termites in Nyasaland, II. **555**; *Diaprepes abbreviatus spengleri* on, in Porto Rico, III. **680**; importation of, into Rhodesia prohibited, II. **163.**
Eucalyptus corymbosa, pests of, in Queensland, III. **490, 491.**
Eucalyptus eximia, *Calloodes grayanus* on, in Queensland, III. **491.**
Eucalyptus gracilis, *Eriococcus serratilobis*, sp. n., on, in Australia, III. **548.**
Eucalyptus piperita, *Lepidosaphes eucalypti* on, in Australia, II. **652.**
Eucalyptus platyphylla, *Anoplognathus boisduvali* on, in Queensland, III. **491.**
Eucalyptus robusta, *Ceronema caudata* on, in Australia, III. **503.**
Eucalyptus siderophloia, *Ctenochiton eucalypti* on, in Australia, III. **652.**
Eucalyptus tereifolia, *Anoplognathus boisduvali* on, in Queensland, III. **491.**
Eucalyptus tessellaria, *Lepidiota albohirta* on, in Queensland, III. **490.**
Eucalyptus, as an insecticide, I. **10**, III. **284**; essence of, against vine pests, III. **211**; leaves of, against *Lepisma saccharina*, III. **714.**
Euceraphis betulae, on birches in California, II. **251.**
Euceraphis gillettei, sp. n., food-plants of, in California, III. **686.**
Eucharia festiva, on lettuce in France, I. **504**; on vines in France, II. **362.**
Eucharis Lily, *Hemichionaspis minor* on, in Fiji, III. **548.**
Euchrysops pandava, on *Cycas* in Ceylon, III. **24, 157.**
Euclea indetermina (Rose Slug Caterpillar), bionomics of, in U.S.A., II. **93, 94.**
Euclemensia bassettella, destroying *Kermes galliformis* in Canada, I. **400.**
Euclidia glyphica, on lucerne in Europe, I. **527.**
Euclidia mi, on lucerne in Europe, I. **527.**
Eucoila, parasite of *Ceratitis capitata* in Nigeria, III. **169.**
Eucoila hunteri, parasite of *Agromyza* in U.S.A., II. **46.**
Eucoila rapae (see *Cothonaspis*).
Eucomys swederi (*Pteromalus vitis*), parasite of vine moths in Europe, II. **607**, III. **211.**
Eucosma, on beans in E. Africa, I. **415**; on fruit in Nova Scotia, III. **43.**
Eucosma conterminana, on lettuce in France, I. **504.**
Eucosma haracana, bionomics of, on chestnuts in U.S.A., III. **249.**
Eucosma lantana, introduced to destroy lantana in Hawaii, III. **757.**
Eucosma marcidella, on *Hibiscus arnottianus* in Hawaii, III. **680.**
Eucosma nanana (see *Enarmonia*).
Eucosma (*Grapholitha*, *Spilonota*, *Tmetocera*) *ocellana* (Bud-Moth), bionomics and control of, in Canada and U.S.A., I. **87, 90, 134, 290, 339, 404, 406, 413, 676**, II. **457, 665, 674, 675**, III. **68, 69, 72, 258, 259, 414, 515, 552, 565, 583, 619, 719**; on oaks in England, II. **619, 620**; on pears in Holland, III.

199; in orchards in Russia, I. 489, 536, II. 335, 342, 614, 714, 718, III. 51, 220, 399, 402, 613, 639; measures against, II. 190, 359, 388, III. 72, 198, 415, 619, 719.
Eucosma roborana, on roses in Russia, II. 720.
Eucosma (*Grapholitha*, *Epiblema*) *tedella*, on *Picea excelsa* in Holland I. 386; on firs in Norway, III. 696; on firs in Russia, II. 341; on spruce in Scotland, II. 168; on spruce in Sweden, III. 290.
Eucosma tripunctata, on fruit trees in France, III. 496; on roses in Russia, II. 720.
Eudamus proteus (Bean Leaf-roller), in Florida, I. 264; in the West Indies, I. 389, III. 411, 504.
eudeminis, *Phygadeuon*.
Eudemis botrana (see *Polychrosis*).
Eudesmus grisescens, on cacao in Trinidad, II. 460.
Eudipnus micans, II. 337.
Eudothia parasitica (Chestnut Blight), spread by Microlepidoptera in Pennsylvania, II. 29.
Euergestis (see *Evergestis*).
Eugenia, *Ceroplastes floridensis* intercepted on, in California, III. 626; *Ceratitis capitata* on, in Hawaii, I. 374; pests of, in Java, III. 3, 713; *Aspidiotus destructor* imported into U.S.A. on, from the Philippines, III. 455.
Eugenia jambolana (Java Plum), I. 76.
Eugenia jambos (Rose Apple), *Tetranychus bioculatus* on, in Ceylon, II. 306; *Ceratitis capitata* on, in Hawaii, I. 374; *Psychonoctua* on, in Porto Rico, I. 389.
Eugenia malaccensis (Malay Rose Apple), *Dacus ferrugineus* on, in the Philippines, I. 157.
Eugenia micheli (Surinam Cherry), *Ceratitis capitata* on, in Bermuda, III. 171.
eugeniae, *Phenacaspis*.
Eugenol, experiments with *Dacus zonatus* and compounds allied to, II. 558.
Euhallidaya severini, sp. n., parasite of *Diapheromera femorata* in U.S.A., III. 17.
Eulecanium armenaicum (Brown Apricot Scale), control of, in California, III. 122.
Eulecanium berberidis, on grapes in Australia, III. 652.
Eulecanium bituberculatum, not parasitised by *Trichogramma semblidis* in Russia, II. 523; on fruit trees in Russia, II. 636, 715.
Eulecanium canadense, on elm in California, II. 663, III. 689.
Eulecanium capreae, on horse-chestnut in Ireland, II. 656.
Eulecanium cerasi, control of, in Russia, II. 650, III. 225.
Eulecanium cerasorum, on black walnut in California, II. 599.
Eulecanium corni, synonyms of, I. 141; on gooseberries in France, II. 621; in orchards in Russia, II. 198, 331; III. 45, 396, control of, on currants in Switzerland, III. 496; in orchards in U.S.A., I. 133, 467, II. 492, 706; parasites of, I. 309.
Eulecanium (*Physokermes*) *coryli*, on fruit trees in Russia, II. 636, 715, III. 225.
Eulecanium (*Lecanium*) *juglandis*, on walnut in Russia, III. 206.
Eulecanium (*Lecanium*) *magnoliarum*, food-plants of, in Japan, III. 127.
Eulecanium nigrofasciatum (Terrapin Scale), control of, on peach, etc., in U.S.A., I. 283, 403, II. 119, 492, III. 182, 192, 552, 708, 709.
Eulecanium (*Coccus*, *Lecanium*), *persicae* (Peach Scale), food-plants of, in Australia, III. 653; on peaches and gooseberries in England, II. 101, 563; on vines in France, I. 255, II. 421, 609; on roses and gooseberries in Italy, III. 124; on peaches in Russia, III. 182; barium-sulphur ineffective against, in U.S.A., III. 708.
Eulecanium pruinosum (Frosted Scale), on black walnut in California, II. 599.
Eulecanium prunastri (Plum Scale), in orchards in Quebec, II. 94.
Eulecanium pseudomagnoliarum, sp. n., on citrus in Japan, III. 127.
Eulecanium pyri, on fruit trees in Russia, II. 636, 715, III. 601, 606, 610; on *Pyrus* spp. in U.S.A., I. 467.
Eulecanium quercifex (Oak Scale), on oak in Alabama, II. 600, 601; experiments with, in California, I. 55.
Eulecanium (*Lecanium*) *ribis*, in Norway, III, 108.
Eulecanium robiniarum, food-plants in California, II. 663, III. 150; bionomics of, in Russia, I. 487, II. 45, III. 42, 225, 393, 542.
Eulimneria costalis, parasite of *Depressaria apicella* (*Schistodepressaria nervosa*) in Germany, I. 515.

Eulophonotus myrmeleon, on cacao in Nigeria, III. 165, 663.
Eulophus, parasite of *Hypera murina* in Russia, II. 109; parasite of *Sciaphobus squalidus* in Russia, II. 338.
Eulophus borbonicus, parasite of *Leucoptera coffeella* in the Antilles and Réunion, II. 216.
Eulophus hylotomarum, parasite of *Hylotoma rosae* in France, I. 335.
Eulophus incubitor, parasite of *Hylotoma rosae* in France, I. 335.
Eulophus migrator, parasite of *Hylotoma rosae* in France, I. 335.
Eulophus miser, I. 549.
Eulophus polydrosis, parasite of vine moths in Russia, III. 211.
Eulophus roesellae, I. 549.
Eumarchalia gennadii, on carob bean in Italy, III. 55.
Eumenes arbustorum, predaceous on *Colias* in France, II. 577.
Eumenes maxillosa, predaceous on Noctuid larvae in Nigeria, III. 164.
Eumerus aeneus (see *E. strigatus*).
Eumerus lunulatus (see *E. strigatus*).
Eumerus strigatus (Narcissus Fly), in Holland, III. 200; on onions and garlic in Russia, III. 544; infesting bulbs of narcissus, etc., II. 89, 344, 345, 633.
Eumicrosoma benefica, parasite of *Blissus leucoptera* in U.S.A., II. 383, III. 452.
Eumolpus vitis (see *Adoxus*).
Eunotus americanus, sp. n., parasite of *Eriopeltis festucae* in U.S.A., III. 724.
euonymellae, *Tetrastichus*.
euonymellus, *Hyponomeuta*.
euonymi, *Chionaspis*.
euonymi-papaveris, *Aphis* (see *A. rumicis*).
Euonymus (Spindle Tree), scale-insects on, in Australia, II. 584, III. 503; pests of, in France, I. 188, 227, II. 236, 390, 478; pests of, in Italy, II. 150, III. 124; not attacked by *Aporia crataegi* in Russia, II. 468; *Sciaphobus squalidus* on, in Russia, I. 488, II. 337; *Aphis rumicis* on, I. 78, 188, 227, II. 236, 478, 660.
Euonymus atropurpureus, *Hyponomeuta multipunctellus* on, in U.S.A., I. 64.
Euonymus europaeus (Spindle Tree), *Hyponomeuta euonymellus* on, in Russia, III. 545; *Aphis rumicis* on, I. 78, 188, 227, II. 17, 428, 494, 620, III. 542; *Aulacaspis pentagona* on, I. 221; food-plant of *Clysia ambiguella*, I. 7, III. 210.
Euonymus japonicus (Japanese Spindle-wood), *Aphis rumicis* (*euonymi*) on, in France and Russia, II. 236, III. 542; *Chionaspis euonymi* on, in Russia, I. 363.
Eupachylomma (*Wesmaelia*) *rileyi*, parasite of *Toxoptera graminum* in U.S.A., III. 90.
Eupatorium odoratum (Christmas Bush), *Tomaspis rubra* on, in the West Indies, II. 62, 430.
Eupelminus swezeyi, probably a parasite of *Isosoma* in Hawaii, III. 249.
Eupelmus, parasite of Lepidoptera in Hawaii, III. 681; parasite of *Isosoma* spp. in Russia, II. 473; parasite of *Recurvaria nanella* in U.S.A., III. 141.
Eupelmus afer, parasite of *Dacus oleae* in Eritrea, III. 173, 432.
Eupelmus allyni, parasite of *Mayetiola destructor* in U.S.A., I. 528, II. 225, III. 416.
Eupelmus atropurpureus, parasite of *Philachyra apterum* in Russia, II. 472.
Eupelmus cereanus, parasite of *Galleria mellonella*, I. 454, II. 379.
Eupelmus degeeri, parasite of *Philachyra apterum* in Russia, II. 472, 473.
Eupelmus dysombrias, parasite of *Phlyctaenia ommatias* in Hawaii, III. 681.
Eupelmus koebelei, sp. n., in Br. Guiana, III. 675.
Eupelmus meteori, hyperparasite of *Cirphis* spp. in Texas, III. 684.
Eupelmus saissetiae, sp. n., parasite of *Saissetia oleae* in Eritrea, III. 432.
Eupelmus spermophilus, sp. n., on olives in Africa, III. 432.
Eupelmus urozonus, parasite of *Dacus oleae* in Europe, III. 432.
Eupeodes volucris, predaceous on Aphids in U.S.A., II. 527, III. 142.
Euphorbia, *Adelphocoris lineolatus* on, in Russia, II. 425; *Eurygaster integriceps* on, in Russia, I. 447; not attacked by *Phlyctaenodes sticticalis* in Russia, I. 534; *Tychea phaseoli* on, III. 749.
euphorbiae, *Aphthona*; *Haltica*.
Euphorocera claripennis (see *Phorocera*).
Euphrasia officinalis, in Russia, II. 315.
Euphyllura aethiopica, parasites of, on olive in Africa, III. 432.
Euphyllura longiciliata, on olives in Cape Colony, III. 432.

Euphyllura olivina (Olive Psylla), on olives in Italy, I. 391; on olives in Palestine, II. 623.
euphytus, Rhizotrogus.
Eupithecia alliaria, on onions and garlic in Russia, III. 544.
Eupithecia assimilata, on gooseberries in France, II. 622.
Eupithecia linariata, on flax in France, III. 428.
euplectri, Tetrastichus.
Euplectrus insuetus, parasite of *Lorema accius* in Florida, III. 151.
Euplectrus platyhypenae, parasitised by *Tetrastichus euplectri* in Louisiana, III. 151; parasite of *Cirphis* spp. in Texas, III. 684.
Euplexia conducta, on safflower in Madras, II. 139.
Euplexia lucipara, on lettuce in France, I. 504.
Eupristocerus cogitans, on black alder in Carolina, I. 161.
Euproctis atomaria, on tea in Ceylon, III. 157.
Euproctis auriflua, on fruit trees in Britain, I. 433; in Holland, III. 742.
Euproctis chrysorrhoea (Brown-tail Moth), Br. Columbia free from, II. 85; bionomics and control of, in Canada and U.S.A., I. 47, 53, 64, 141, 290, II. 156, 187, 250, 251, 294, 295, 393, 710, III. 9, 42, 62, 69, 71, 194, 328–330, 369, 507, 513, 678; in France, I. 270, II. 422; in Germany, II. 499; in Holland, III. 196; bionomics and control of, in Russia, I. 449, 491, 492, 496, 498, 523, 536, II. 13, 36, 42, 44, 76, 264, 298, 332, 335, 428, 442, 463, 468, 522, 614, 712, 718, III. 27, 41, 46, 51, 52, 172, 221, 238, 392, 397, 400, 403, 482, 485, 545, 601, 606, 613, 639; on almond, etc., in Spain, III. 276; in Switzerland, I. 223; in the United Kingdom, I. 463, II. 187; on imported French nursery stock in U.S.A., III. 454; legislation against, I. 48, II. 187, 208, 251, III. 9, 71, 516, 657; natural enemies of, I. 141, 167, 250, 270, 336, 402, 432, II. 136, 156, 187, 222, 295, 343, 394, 710, III. 42, 62, 63, 136, 220, 330, 639; measures against, I. 454, 455, II. 136, 156, 187, 251, 295, 394, 711, 712, III. 328–330, 369, 485, 513, 678.
Euproctis lyonia, on cotton in Nigeria, II. 106.
Euproctis minor, destroying *Chionaspis tegalensis* in Java, III. 318.
Euproctis (*Porthesia*) *producta,* on cotton in E. Africa and Zanzibar, II. 580, III. 124.
Euproctis scintillans, on *Acacia decurrens* in Ceylon, II. 644, III. 84.
Eupsephopactes procincta (see *Hadena*).
Eupsilia (*Scopelosoma*) *satellitia,* on apple and raspberry in Russia, II. 370, III. 221.
Eupteromalus, parasite of *Cirphis unipuncta* in U.S.A., III. 553; parasite of *Sarcophaga* in U.S.A., III. 82.
Eupteromalus arvensis, sp. n., parasite of *Mayetiola destructor* in Russia, II. 65, 66.
Eupteromalus sarcophagae, parasite of *Sarcophaga kellyi* in Kansas, III. 151.
Eupterote fabia, on dadap in Ceylon, III. 61.
Eupterote geminata (see *E. petosiris*).
Eupterote petosiris, food-plants of, in Ceylon, III. 61, 157.
Eupteryx atropunctata, effect of, on potato in England, III. 287.
Europe, I. 167, 315, 346, 350, 351, 411, 448, 531, 549, II. 45, 156, 169, 183, 184, 205, 246, 248, 276, 280, 284, 294, 307, 350, 453, 510, 524, 531, 625, 644, 646, 696, 701, III. 11, 138, 299, 416, 748, 750; beet pests in, II. 90, 466, 467, 468; Bostrychidae of, II. 621; bionomics of *Chermes* spp. in, II. 13, III. 592–599; parasites of *Eucosma ocellana* in, III. 584; fruit pests in, II. 419; natural control of gipsy moth in, I. 34; Lepidopterous larvae and their food-plants in, II. 364; pests of lucerne in, I. 526, II. 669; list of parasites of *Mayetiola destructor* in, II. 65; distribution of *Tetranychus telarius* in, III. 13; vine pests in, III. 196.
European Elm-leaf Aphis (see *Eriosoma ulmi*).
European Felt Scale (see *Cryptococcus fagi*).
European Fir (see *Picea excelsa*).
European Fruit Scale (see *Aspidiotus ostreaeformis*).
European Grain Aphis (see *Aphis avenae*).
European Grain Moth (see *Tinea granella*).
European Mole Cricket (see *Gryllotalpa gryllotalpa*).
European Pine-shoot Moth (see *Rhyacionia buoliana*).
European Silver Fir (see *Abies pectinata*).

European Walnut Aphis (see *Chromaphis juglandicola*).
Eurycles, Merodon equestris on, II. 88, 246.
Eurycreon sticticalis (see *Phlyctaenodes*).
Eurydactylus (*Eccoptopterus*) *sexspinosus*, on cacao and coffee in Ceylon, etc., I. 89, 350, 351, III. 663.
Eurydema festivum, bionomics of, on mustard, etc., in Astrachan, II. 355, 358, III. 45, 439, 638.
Eurydema festivum var. *chloroticum*, on mustard, etc., in Astrachan, II. 355, III. 220.
Eurydema festivum var. *decoratum* (*Strachia pustulata*), in market-gardens in Russia, III. 479, 481.
Eurydema maracandicum, on cabbage in Russia, II. 716.
Eurydema (*Strachia*) *oleraceum*, on cereals, etc., in Denmark, III. 246, 247, 698; on lettuce in France, I. 504; bionomics of, on rape, etc., in Russia, I. 395, 449, III. 6, 45, 401, 479, 481.
Eurydema (*Pentatoma*) *ornatum*, bionomics of, in Russia, I. 395, 449, 460, 536, II. 355, 357, 358, 614, III. 45, 220, 439, 638; experiments with *Coccobacillus* and, I. 336; infested with *Sporotrichum globuliferum* in Italy, I. 316.
Eurydema ornatum var. *dissimile*, on mustard and cabbage in Russia, III. 220.
Eurydema pulchrum, on lettuce in the Philippines, I. 314.
eurydemae, Aphanurus (*Telenomus*).
Eurydinotomorpha pax, sp. n., in North Queensland, III. 358.
Eurygaster, in Russia, II. 198, III. 229, 440.
Eurygaster austriacus, on cereals in Russia, II. 171, III. 45, 220, 401, 479.
Eurygaster hottentotus, in Russia, I. 447.
Eurygaster integriceps, bionomics of, on cereals in Russia, I. 447–450, 451, II. 171, 202, 716, III. 45, 242, 401; distribution of, I. 446.
Eurygaster marrocanus, on field crops in Russia, II. 202.
Eurygaster maurus, on cereals, etc., in Russia, I. 447, II. 171, 202, III. 45, 205, 220, 238, 401, 481; parasites of, I. 448.
Euryischia leucopidis, sp. n., parasite of *Leucopis* in Eritrea, III. 432.
eurymi, Pteromalus.
Eurymus eurytheme (see *Colias*).
Eurystomus orientalis, destroying locusts in the Philippines, I. 68.
Eurytela dryope, on castor oil plants in East Africa, I. 415.
eurytheme, Colias (*Eurymus*).
Eurytoma, parasite of gall-flies in California, I. 36; larvae of, feeding on *Cryptocampus angustus* in Russia, II. 471; parasite of *Philachyra apterum* in Russia, II. 473; parasite of *Oncideres putator* in U.S.A., III. 475; parasite of *Recurvaria nanella* in U.S.A., III. 141.
Eurytoma amygdali, bionomics of, in stone fruits in Astrachan and Bulgaria, II. 348, 349, III. 222, 727.
Eurytoma gibba, on clover in Russia, II. 198.
Eurytoma juniperinus (Juniper-berry Chalcid), infesting juniper berries in U.S.A., III. 580.
Eurytoma oleae, sp. n., in olives in Africa, III. 432.
Eurytoma piurae, parasite of *Anthonomus vestitus* in Peru, I. 316.
Eurytoma samsonovi, sp. n., in apricots in Russia, III. 727.
Eurytoma schreineri, in plums and apricots in Russia, I. 536.
Eurytoma varicolor, sp. n., in olives in Africa, III. 432.
Eurytrachelus intermedius, on coconut in South Sea Islands, II. 2.
Eurytrachelus pilosipes, on coconut and papaw in the Solomon Islands, II. 689; on coconut in the South Sea Islands, II. 2.
Euscepes (*Cryptorrhynchus*) *batatae* (Jacobs, Scarabee), on sweet potatoes in West Indies, I. 263, 329, II. 88, 477, III. 5, 461, 477.
Euschistus variolarius, on maize and potatoes in U.S.A., III. 459.
Eusemion longipenne, hyperparasite of *Coccus hesperidum* in U.S.A., I. 309, 310.
Eusol, formula for, against *Aulacaspis* (*Diaspis*) *pentagona*, II. 123.
Eutermes, on coconut in the South Sea Islands, II. 3.
Eutermes acagutlae, on sugar-cane in Porto Rico, II. 284.
Eutermes costaricensis, on sugar-cane in the West Indies, II. 284.
Eutermes haitiensis, on sugar-cane in the West Indies, II. 284.
Eutermes (*Termes*) *morio*, on sugar-cane in Porto Rico, I. 185, II. 49.
Eutermes sanctae-luciae, on sugar-cane in St. Vincent, II. 284.
Eutermes usambariensis, damaging timber in East Africa, I. 414.
Eutettix tenella (Sugar-beet Leaf-hopper), in Arizona, I. 180; parasites of, in California, III. 463, 557.

Euthrips, II. 271; on sweet potatoes in Barbados, II. 533.
Euthrips citri (see *Taeniothrips*).
Euthrips fuscus (see *Frankliniella*).
Euthrips insularis (see *Frankliniella*).
Euthrips occidentalis, enemy of *Tetranychus telarius* (*bimaculatus*) in U.S.A., I. 353.
Euthrips pyri (see *Taeniothrips*).
Euthrips robustus (see *Kakothrips*).
Euthrips tritici (see *Frankliniella*).
Eutochia fullo, on sugar-cane in Mauritius, I. 31.
Eutrixiodes jonesi, parasite of *Lachnosterna* spp. in Porto Rico, I. 184, II. 48.
Euvanessa antiopa, parasitised by *Pteromalus puparum* in U.S.A., I. 141, 142.
Euxoa agrestis (Western Army Worm), on lucerne in California, II. 246; in Canada, III. 629.
Euxoa auxiliaris (*Chorizagrotis sorror*), in Canada, III. 629; on cactus in U.S.A., I. 80.
Euxoa conspicua, in Russia, I. 490.
Euxoa corticea, in Russia, I. 258.
Euxoa declarata (see *E. tessellata*).
Euxoa detersa, on vegetables in Canada, III. 629.
Euxoa excellens, in Canada, III. 629.
Euxoa introferens (see *E. auxiliaris*).
Euxoa messoria (Dark-sided Cutworm), food-plants of, in Canada, I. 400, III. 628.
Euxoa nigricans, in Russia, II. 258.
Euxoa ochrogaster (Red-backed Cutworm), bionomics of, in Canada, I. 400, II. 24, III. 68, 628.
Euxoa personata (see *E. detersa*).
Euxoa scandens (see *Lycophotia*).
Euxoa segetum (Common Cutworm), on cotton and tobacco in Africa, I. 287, II. 1, 267, 277; on crops in France, I. 504, II. 607; on lettuces in Ireland, II. 656; on tobacco in Rhodesia, I. 287; bionomics and control of, in Russia, I. 215, 317, 358, 395, 459, 462, 484, 490, 535, 539, 540, II. 37, 51, 53, 54, 171, 197, 198, 202, 211, 212, 257, 258, 265, 266, 290, 312, 314, 315, 340, 341, 342, 370, 372, 502, 523, 695, 713, 718, III. 19, 46, 67, 152, 229, 337, 639–641; natural enemies of, I. 317, 462, 539, 540, II. 212, 312, 342, 372, 523, III. 46, 639; measures against, II. 54, 171, 197, 257, 258, 290, 312, 314, 315, 342, 372, 469, III. 152, 229, 337.
Euxoa spinifera, on cotton in Africa, II. 1, 2; on tobacco in the Far East, II. 490.
Euxoa tessellata (Common Striped Cutworm), bionomics and control of, in Canada, II. 24, III. 551, 629.
Euxoa (*Agrotis*) *tritici*, on vines in Italy, III. 387; on grain crops in Russia, II. 171, III. 403, 639; on conifers in Sweden, III. 66.
Euxoa tritici var. *aquilina*, on vines in Italy, III. 113.
Euzophera impletella (see *E. semifuneralis*).
Euzophera semifuneralis (American Plum Borer), bionomics of, in U.S.A., III. 418, 654, 655; not parasitised by *Calliephialtes messor* in U.S.A., II. 138.
evanescens, *Palaconeura*.
Evania abyssinica, parasite of cockroaches in Egypt, II. 504.
Evania laevigata, parasite of cockroaches in Egypt, II. 504.
Evening Primrose (see *Oenothera biennis*).
Evergestis (*Orobena*) *extimalis*, bionomics of, on Cruciferous plants in Russia, I. 536, II. 52, 355, 357, III. 221, 637.
Evergestis (*Orobena*) *margaritalis*, on rape in Russia, I. 396.
Everlasting Pea (see *Lathyrus*).
Evetria (see *Rhyacionia*).
evetrivorus, *Podogaster*.
evicta, *Haltica*.
examinator, *Pimpla*.
exareolata, *Angitia*.
exareolatus, *Dioctes*.
excavatum, *Anomalon*.
excellens, *Euxoa*.
excerptalis, *Scirpophaga*.
excisa, *Carcelia*.
exclamationis, *Feltia* (*Agrotis*); *Oecanthus*.
exempta, *Laphygma*.
Exenterus, parasite of *Lophyrus* in Russia, II. 215.
Exetastes agrotidis, parasite of cutworms in Russia, II. 212.
exigua, *Laphygma* (*Caradrina*).
exitiosa, *Aegeria* (*Sanninoidea*).
exitiosus, *Oxycarenus*.
exocarpi, *Poliaspis*.
Exocarpus aphylla, *Aspidiotus junctilobius* on, in Australia, II. 427; *Mytilaspis subspiculifera*, sp. n., on, in Australia, III. 79.
Exocarpus cupressiformis, *Poliaspis exocarpi* on, in Australia, III. 80.
Exochomus, predaceous on *Hemichionaspis minor* in Peru, I. 323.
Exochomus cherenensis, sp. n., from Eritrea, III. 431.
Exochomus flavipes var. *troberti*, predaceous on *Aphis sorghi* in the French Sudan, II. 396, 631.

Exochomus latiusculus, predaceous on *Dactylopius confusus* in U.S.A., I. 81.
Exochomus marginipennis, predaceous on *Dactylopius confusus* in U.S.A., I. 81.
Exochomus nigromaculatus, predaceous on *Toxoptera graminum* in South Africa, II. 154; parasites of, II. 154.
Exochomus quadripustulatus, on pines in England, II. 497; predaceous on Aphids and scale-insects, II. 79, 81, III. 143, 220.
Exochus gravipes, parasite of *Hyponomeuta malinellus* in Russia, I. 347.
Exochus mansutor, parasite of *Hyponomeuta malinellus* in Russia, I. 347.
Exochus mitratus, parasite of *Hyponomeuta malinellus* in Russia, I. 347.
Exochus ovatus, parasite of *Tinea pellionella*, III. 509.
Exochus tibialis, parasite of *Polychrosis botrana*, III. 497.
exoleta, Xylina (*Calocampa*).
Exomias (*Barypithes*) *pellucidus*, food-plants of and measures against, in England, III. 287, 564.
Exophthalmus esuriens (see *Diaprepes*).
Exophthalmus famelicus (see *Diaprepes*).
Exoprosopa fascipennis, parasite of *Tiphia inornata* in U.S.A., III. 88.
Exorista, in Canada, I. 114.
Exorista arvicola, parasite of *Hyponomeuta* spp. in U.S.A., I. 64.
Exorista blanda, parasite of *Cacoecia* (*Archips*) *argyrospila* in U.S.A., I. 226.
Exorista cheloniae, parasite of *Cacoecia argyrospila* in U.S.A., I. 226.
Exorista dubia, parasite of *Melasoma* (*Lina*) *populi* in France, I. 334.
Exorista grandis, parasite of *Procris* (*Ino*) *ampelophaga* in Russia, I. 363.
Exorista nigripalpis, parasite of *Cacoecia argyrospila* in U.S.A., I. 226.
Exorista pyste, parasite of *Pachyzancla bipunctalis* in Porto Rico, III. 477; parasite of *Cacoecia argyrospila* in U.S.A., I. 226; parasite of *Cacoecia* (*Archips*) *rosana* in U.S.A., II. 188.
Exorista vulgaris (see *Phryxe*).
Exosoma collaris, on asparagus in Astrachan, III. 221.
Exotelia (*Heringia*) *dodecella*, on pines in Sweden, III. 292.
expansum, Paralecanium (*Lecanium*).
explanata, Leptobyrsa.
expunctatus, Bolyphantes.
exsectoides, Formica.
exsiccator, Tetranychus.
extensa, Tetragnatha.
externum, Calosoma.
extimalis, Evergestis (*Orobena*).
extrematis, Ichneumon.
Exypnus pulchripennis, in Java, III. 316.
Eye-spotted Apple-twig Borer (see *Oberea oculata*).

F.

Faba, Cerotoma trifurcata on, in U.S.A., III. 453.
fabalis, Agromyza.
faber, Ergates.
fabia, Earias; *Eupterote*.
Fabiana imbricata (False Heath), *Phthorimaea operculella* on, II. 401.
facialis, Chlorita.
fagi, Cryptococcus; *Lachnus*; *Rhynchaenus* (*Orchestes*); *Phyllaphis*.
Fagisuga triloba, in Chile, I. 138.
Fagus (see Beech).
Fagus grandifolia, Cryptococcus fagi on, in U.S.A., II. 203.
Fagus sylvatica, Cryptococcus fagi on in Europe, II. 203.
falcata, Phaneroptera.
falcataria, Drepana.
falcifera, Syngrapha (*Plusia*).
Fall Army Worm (see *Laphygma frugiperda*).
Fall Cankerworm (see *Alsophila pometaria*).
Fall Webworm (see *Hyphantria cunea*).
fallax, Corymbites; *Diaspis* (see *Epidiaspis piricola*); *Trigonogenius*.
Fallow land, varieties of, in Russia, II. 315, 316, 372, 523.
False Apple Red Bug (see *Lygidea mendax*).
False Chinch Bug (see *Nysius angustatus* and *N. ericae*).
False Codling Moth (see *Enarmonia batrachopa*).
False Heath (see *Fabiana imbricata*).
False Tarnished Plant-bug (see *Lygus invitus*).
famelicus, Diaprepes (*Exophthalmus*).
Fannia canicularis, in Kiev, III. 393.
Fanning Island, *Hemichionaspis minor* intercepted on coconuts from, III. 492.

Far East, insect pests in, I. 351, II. 489–491, 506; (see also under separate countries).
farcta, Amara.
farinae, Tyroglyphus (*Aleurobius*).
farinalis, Pyralis (*Asopia*).
farinatella, Dyscedestis.
farinosus, Cladobius.
fascelina, Dasychira.
fascialis, Zinckenia (*Hymenia*).
fasciata, Aphiochaeta (*Phora*); *Macrosiphoniella*; *Stomatorrhina* (*Idia*) (see *S. lunata*).
fasciativentris, Lathromeroides.
fasciatum, Agaon; *Trichogramma* (*Pentarthron*).
fasciatus, Chromoderus; *Coraebus*; *Dysdercus*; *Heliothrips*; *Herpetophygas* (see *Anthores leuconotus*); *Ipochus*; *Lachnus*; *Oecanthus*; *Phonoctonus.*
fascicularis, Pogonochaerus.
fasciculata, Carineta.
fasciculatus, Acanthocoris; *Araecerus.*
fasciella, Gracilaria (*Marmara*).
fascipennis, Exoprosopa.
fastidiosa, Colaspis.
Fatua, on *Setaria italica* in Madras, III. 677.
faunus, Harpalus.
fausta, Rhagoletis.
faxonii, Epelis truncataria.
feae, Odontotermes.
fecundatrix, Andricus.
Federated Malay States, pests of coconuts in, I. 158, 217, 273, II. 7, 98, 111, 134, 323, 422, 479, 480, 583, III. 13, 323, 467, 724; cultivation of indigo in, II. 323; miscellaneous insect pests of, I. 217, II. 133, III. 12, 361; legislation against insect pests in, II. 7, 391, 422, 479; destruction of locusts in, I. 217, 273, 378, II. 110, 112, 134, 164, 292, 323, 479, 565, 606, 656, III. 361, 467, 705; *Metarrhizium, anisopliae* imported from, III. 754; pests of nutmegs in, I. 351; pests of rubber in, I. 217, II. 133.
feisthameli, Papilio.
Felted Beech Coccus (see *Cryptococcus fagi*).
Feltia annexa, on vegetables in Porto Rico, III. 477.
Feltia ducens, in Canada, III. 629.
Feltia (*Agrotis*) *exclamationis,* in Britain, III. 715, 747; on crops in France, I. 504, II. 607; bionomics and control of, in Russia, I. 395, 490, 499, II. 211, 212, 257, 258, 266, 314, 315, 470, III. 19, 50, 111, 203, 205, 221, 309, 536, 544, 605, 635, 639.
Feltia subgothica (Dingy Cutworm), on vegetables in Canada, II. 24.
Feltia venerabilis, on oats in Canada, III. 629.
femorale, Philematium.
femoralis, Aulacophora; *Heliothrips*; *Pedinus.*
femorata, Callirrhipis; *Chrysobothris*; *Cimbex*; *Diapheromera*; *Tiphia.*
femoratus, Melanoplus.
femur-rubrum, Melanoplus (*Caloptenus*).
fenestralis, Angitia.
fenestratus, Anthrax.
fenestrella, Thyris.
fenestrina, Thyris (see *T. fenestrella*).
Fennel (*Foeniculum vulgare*), *Chrysomphalus aurantii* on, in Australia, II. 584; *Depressaria marcella* on, I. 227, II. 420; *Papilio machaon* on, I. 68.
fennica, Agrotis (*Noctua*).
fera, Echinomyia.
ferganensis, Polydrosus.
Fern Caterpillar (see *Eriopus floridensis*).
Fernaldella beyeriae (see *Mytilaspis*).
fernaldialis, Melitara.
Ferns, *Saissetia filicum* on, in Australia, III. 653; pests of, in Britain, II. 9, 597, 598; pests of in British Guiana, II. 417; *Saissetia hemisphaerica* on, in Italy, III. 124; *Aphelencus olesistus* on, in Russia, II. 424; pests introduced on, into U.S.A., III. 117, 354, 626; pests of, in U.S.A., II. 92, 183, III. 354, 668, 762.
Feronia, predaceous on *Otiorrhynchus ligustici* in Russia, II. 669.
Feronia vulgaris (see *Pterostichus*).
ferox, Pseudaonidia.
ferreae, Aonidia.
Ferrous Arsenate, as an insecticide, III. 264; cactus solution as an adhesive in, III. 295.
ferrugana, Peronia.
ferrugata, Mutilla.
ferrugatus, Miris.
ferrugineipes, Omorgus.
ferrugineum, Tribolium (see *T. castaneum*).
ferrugineus, Dacus (*Bactrocera*); *Rhynchophorus.*
ferus, Nabis (*Coriscus, Reduviolus*).
Fescue Grass (see *Bromus willdenowii*).
festina, Stictocephala.
festiva, Episilia; *Eucharia.*
festivum, Eurydema.
festivus, Diaprepes abbreviatus; *Dysdercus.*
Festuca, Aphis avenae on, II. 696.

Festuca ovina, Dociostaurus (*Stauronotus*) *maroccanus* on, in Russia, I. 543; not attacked by *Phlyctaenodes sticticalis* in Russia, I. 360.
Festuca parvigluma, Eriococcus festucae on, in Japan, III. 127.
Festuca pratensis, Oscinella frit on, in Russia, II. 371.
festucae, Eriococcus; *Eriopeltis*.
Feverbush, not attacked by *Lymantria dispar* in U.S.A., III. 669.
fici, Diamerus.
ficicola, Dacus.
ficifolii, Lepidosaphes.
Ficus, Chrysomphalus aonidum intercepted on, in California, III. 420; *Monophlebus stebbingi* on, in India, II. 339; *Cyrtacanthacris melanocornis* on, in Java, III. 313; *Selenaspidus articulatus* on, in Peru, III. 135; *Lepidiota albohirta* on, in Queensland, III. 490; scale-insects on, in tropical Africa, II. 59, 146, 276, III. 289; (see Fig).
Ficus elastica, Mataeus orientalis on, in East Africa, I. 413; pests of, in German Colonies, II. 414; *Diamerus fici* on, in India, I. 351; pests of, in Java, I. 355, II. 533–535, III. 661.
Ficus hispida, borers of, in Java, II. 535.
Ficus indica, Icerya aegyptiaca on, in East Africa, II. 429.
Ficus infectoria, Petrognatha gigas on, in Kamerun, II. 414; *Prodenia litura* on, in India, I. 482.
Ficus macrophylla, Paralecanium expansum on, in Australia, III. 653.
Ficus nautarum, Saissetia (*Lecanium*) *oleae* on, in the Seychelles, I. 474.
Ficus nitida, Chrysomphalus aonidum on, in Egypt, II. 605.
Ficus nota, caprification of, in the Philippines, I. 341; *Drosicha lichenoides* on, in the Philippines, I. 148.
Ficus religiosa, Petrognatha gigas on, in Kamerun, II. 414.
Ficus rubra var. *seychellensis, Saissetia* (*Lecanium*) *oleae* on, I. 129.
Ficus variegata, Epepeotes luscus on, in Java, II. 535.
ficus, Aspidiotus (see *Chrysomphalus aonidum*); *Ceroplastes*; *Homotoma*; *Hypoborus*; *Psylla*.
Fiddler Beetle (see *Prepodes vittatus*).
Fiddlewood (see *Citharexylum quadrangulare*).
Fidia viticida, on vine in California, III. 493.
Fidicina pullata, on coffee in Brazil, II. 205.
Field Maple (*Acer campestre*), *Clysia ambiguella* on, III. 210.
Fig, *Ceroplastes rubens* on, in Australia, III. 503; *Coccus hesperidum* on, in Britain, III. 675; pests of, in Egypt, II. 505, 605; pests of, in France, I. 229, II. 195, 196, 421, III. 10; *Ceratitis capitata* on, in Hawaii, I. 374; pests of, in Italy, I. 380, III. 124, 143, 745; pests of, in Portugal, I. 313, 314; *Pseudococcus nipae* on, in St. Vincent, III. 411; pests of, in Spain, II. 165, III. 276; pests of, in S. Africa, I. 196, III. 167, 618, 748; damaged by termites in South Rhodesia, I. 466; pests of, in U.S.A., I. 180, 326, 418, II. 113, 436, 438, 464, 465; caprification of, I. 341; not attacked by *Aspidiotus perniciosus*, I. 472; (see *Ficus*).
Fig Fly, Black (see *Lonchaea aristella*).
Fig Moth (see *Ephestia cautella*).
Fig Scale (see *Ceroplastes rusci*).
Fig Wasp (see *Blastophaga grossorum*).
Fig Weevil (see *Omophorus stomachosus*).
Fig, Wild, pests of, in Uganda, III. 168.
Figites anthomyiarum, parasite of *Chortophila brassicae* in Europe, III. 1.
Figs, Dried, *Carpophilus hemipterus* on, II. 511, III. 684.
figuliella, Ephestia.
Fiji, pests of bananas in, I. 136, II. 506, III. 726; beneficial parasites introduced into, III. 88, 758; Coccidae collected in, III. 548; pests of coconut in, II. 133, 150, 690, 691, III. 27; Derbidae from, I. 222; *Elydna reclusa* on tobacco in, II. 629; *Physcus fijiensis* parasite of *Aspidiotus* in, II. 495; pests of sugar-cane in, III. 133, 726, 748.
Fiji Coconut Hispid (see *Promecotheca coeruleipennis*).
fijiensis, Physcus.
filamentosus, Pseudococcus.
Filbert (see Hazel).
Filbert Bud Mite (see *Eriophyes avellanae*).
filicum, Saissetia (*Lecanium*).
filiformis, Ischnaspis (see *I. longirostris*).
filigramma, Polia.
Filipendula ulmaria (see *Spiraea*).

filipendulae, Zygaena.
Filippia oleae, distribution of, on *Hedera helix,* in Europe, II. 377.
fimbria, Tryphaena (Agrotis).
fimbriata, Scutare.
fimbriatum, Asterolecanium.
fimetarius, Hister.
Finch, destroying *Sitones hispidulus* III. 380.
finitimus, Siphoninus.
Finland, insect pests in, II. 54, 100, 152, 419, III. 208, 566.
Fiorinia acaciae, on *Acacia* in Australia, III. 80.
Fiorinia casuarinae, food-plants of, in Australia, III. 80.
Fiorinia fioriniae, on ornamental plants in Peru, III. 135; intercepted in U.S.A. from Hawaii, III. 558; in U.S.A., I. 101.
Fiorinia fioriniae var. *japonica,* in U.S.A., I. 101.
Fiorinia maskelli (see *Leucaspis*).
Fiorinia morrisi (see *Leucaspis gigas*).
Fiorinia (Aspidiotus) secreta, on bamboo in Ceylon, III. 755.
Fiorinia theae, distribution of, in U.S.A., I. 101; imported into U.S.A. on mango from Java, II. 460; on citrus in India, I. 279.
fioriniae, Fiorinia.
Fir, *Cneorrhinus plagiatus* on, in Britain, III. 501; bark-beetles on, in Germany, II. 325, 486, 501; pests of, in Holland, I. 385, 386, III. 196, 199, 742; pests of, in Italy, III, 124; *Tortrix fumiferana* on, in Maine, I. 201, II. 710; pests of, in Norway, III. 696; pests of, in Russia, II. 220, 221, 222, 341, III. 66, 217, 606; pests of, in Sweden, II. 242, III. 255, 290; resistant to gipsy moth in U.S.A., I. 35, II. 711, III. 669; *Chermes* spp. on, I. 387, II. 14, III. 343, 350, 592–598; (see *Abies* and *Picea*).
Fir, American Silver (see *Abies concolor*).
Fir, Balsam (see *Abies balsamea*).
Fir, Douglas (see *Pseudotsuga taxifolia*).
Fir, Scotch (see *Pinus sylvestris*).
Fir, Silver (see *Abies pectinata*).
Fir Bud Moth (see *Argyresthia illuminatella*).
Fir Oil, used against insects, III. 372, 747.
Fir Sawfly (see *Lophyrus abietis*).
Fire Ant (see *Solenopsis geminata*).
Fire Blight (see *Bacillus amylovorus*).
Fire Blight of Acacia, varieties of, in Australia and Ceylon, III. 83.
fischeri, Stenobothrus.
Fish Oil, formulae containing, II. 110, 123, 641, III. 155, 417; relative attractiveness of, for *Ceratitis capitata,* III. 28.
fissilis, Melanotus.
fistulator, Dihammus (Monochamus).
fitchi, Aphis.
flabellicornis, Tetralobus.
flaccidifex, Gyrococcus.
Flacherie, in Coleoptera, II. 180, 223, 260; in Lepidopterous larvae, I. 38, 361, 462, II. 101, 105, 212, 274, 484, 528, III. 196, 393; in silkworms, I. 287, 307, II. 528.
Flacourtia, Aulacaspis pentagona on, in Ceylon, III. 83; scale-insects on, in Java, I. 150.
Flacourtia inermis, Icerya seychellarum on, in the Seychelles, I. 76.
Flacourtia ramontchii, scale-insects on, in Ceylon, III. 168.
Flacourtia sapinda, Saissetia (Lecanium) nigra on, in East Africa, II. 429.
flacourtiae, Aulacaspis.
flaminius, Homalotylus.
Flamboyant (see *Poinciana regia*).
flammea, Panolis.
Flat-headed Apple-tree Borer (see *Chrysobothris femorata*).
flava, Anthrax; Cryptolechia; Lepidosaphes (Mytilaspis).
flavago, Xanthoecia (Gortyna).
flavator, Iphiaulax.
flaveola, Agromyza; Scaptomyza.
flaveolatum, Agrypon.
flaveolus, Anagrus.
flavescens, Cnidocampa; Cryptognatha; Empoasca; Pantala.
flavicans, Degeeria; Theronia.
flaviceps, Leucotermes.
flavicincta, Antitype (Polia).
flavicollis, Calotermes; Dasyllis.
flaviconchae, Apanteles (Protapanteles).
flavicornis, Leucopis; Phytomyza.
flavicosta, Arcyptera (Stethophyma).
flavidissimalis, Mimorista.
flavilatera, Tomaspis.
flavilineata, Gypona.
flavimana, Anthaxia.
flavinode, Praon.
flavipalpis, Sigalphus.
flavipennis, Aphrastobracon; Trioza.
flavipes, Apion; Chalcis; Clidogastra (Cleigastra); Exochomus; Leucotermes (Termes); Luperus; Megastigmus; Sympiesis.
flaviscapus, Bothriothorax.
flavistriata, Ereunetis.
flaviventris, Aphelinus; Neurotoma; Lyda; Pachnoda.
flavizonatus, Amblyteles.

flavocollaris, Sierola.
flavomaculata, Adalia.
flavomarginatus, Nabis.
flavoscutellum, Coccophagus.
flavosparsus, Orthotylus.
flavoviridis, Cirrospilus.
flavum, Trichogramma.
flavus, Encyrtus; *Eucallipterus*; *Lasius*; *Microterys*; *Tetranychus*; *Thrips.*
Flax (*Linum*), pests of, in France, III. 428; flea-beetles on, in Ireland, II. 8; pests of, in Montana, III. 335, 457; *Eurygaster integriceps* on, in Russia, I. 447; not attacked by *Oria musculosa* in Russia, II. 392; *Aulax lini*, sp. n., on, in Sicily, III. 714.
Flax, New Zealand (see *Phormium tenax*).
Flea-bane (*Erigeron annuum*), *Crambus caliginosellus* on, in Virginia, II. 525.
Flea-Beetles, methods of controlling, I. 246, 298–300, III. 178, 328, 394, 452, 541, 547; on potatoes in Canada, III. 552; (see *Haltica, Chaetocnema, Epitrix*).
flecki, Podonta.
fletcherella, Coleophora.
flexa, Tritoxa.
flexuosa, Phyllotreta.
Flicker, destroying insects, III. 249, 380.
floccifera, Pulvinaria.
floccus, Chermes.
floralis, Anthomyia; *Mylabris* (*Zonabris*); *Plagionotus.*
florea, Apis.
Floria Quassia Soap, formula for, I. 246.
floricola, Chrysobothris; *Monomorium.*
floricola, Eriophyes pini.
Florida, *Aleurodes* spp. in, I. 267, III. 22; *Carolinaia cyperi*, sp. n., in, III. 406; citrus pests in, I. 171, 186, II. 306, 311, III. 22, 332, 444; cotton pests in, I. 186, 353; pests of Cucurbitaceae in, I. 204, 218, 219; parasites of *Dracunculacephala mollipes* in, III. 577; bionomics of *Eriopus floridensis* in, II. 92; beneficial fungi in, II. 129; Hymenopterous parasites in, I. 238, III. 151; miscellaneous pests in, I. 101, 264, II. 541, III. 81, 306, 325, 508, 569; pests from, intercepted in quarantine, III. 420, 548, 625; *Phthorimaea operculella* on potato and tobacco in, I. 102, II. 280; new Thysanoptera from, I. 149, 512, II. 279, III. 326, 357, 566, 631; tomato pests in, III. 176.
Florida Fern Caterpillar (see *Eriopus floridensis*).
Florida Red Scale (see *Chrysomphalus aonidum*).
Florida Wax Scale (see *Ceroplastes floridensis*).
floridensis, Ceroplastes; *Cryptothrips*; *Eriopus* (*Callopistria*); *Leptothrips*; *Phloeothrips.*
florum, Opomyza.
Flour, effect of heat on pests of, I. 152, II. 702, III. 175; insects infesting, I. 118, 293, 344, II. 40, 41, 117, 492, 502, 503, 537, 564, III. 175, 566, 694, 733.
Flour Mite (see *Tyroglyphus farinae*).
Flour Paste, preparation of, for sprays, II. 83.
Flower Bud Maggot (see *Contarinia gossypii*).
fluctuosalis, Nymphula.
fodiens, Aspidiotus (*Chrysomphalus*); *Eriosoma* (*Schizoneura*) (see *E. ulmi*).
foliacea, Haltica.
folii, Dryophanta (*Diplolepis*).
Fonscolombia fraxini, on ash in Britain, III. 754.
foraminifer, Cardiococcus.
Forbes Scale (see *Aspidiotus forbesi*).
forbesi, Aleurochiton; *Aphis*; *Aspidiotus.*
Forest Entomology, works on, I. 199, 533, II. 328, 329.
Forest Tent Caterpillar (see *Malacosoma* spp.).
forestan, Rhopalocampta.
Forests, pests of, in the British Isles, I. 91, 297, 463, II. 54, 163, 168, 192, 237, 497, 619, 661, III. 190, 406, 459, 559, 676, 718, 762; pests of, in Central Europe, I. 239, 371–373, 394, 533, II. 54, 147, 235, 325–328, 375, 482, 485, 501, 529, 571, 621, 667, 720; pests of, in Canada, I. 166, 201, 231, 406, II. 24, 491, III. 2, 19, 43, 327; pests of, in India, I. 351, 354, 381, 525, II. 339, 688, III. 154, 706, 722, 729; pests of, in Russia, I. 362, 395, 432, 461, 539, II. 9, 10, 12, 13, 198, 220–223, 243, 274, 304, 305, 329, 331, 337, 341, 482, 516, 692, 699, III. 14, 43, 48, 50, 76, 119, 138, 217, 223, 227, 337, 341–343, 391, 392, 394, 398, 437, 482, 485, 540, 544, 592–599, 603, 607, 699, 728; pests of, in Scandinavia, II. 54, 100, 168, 242, III. 47, 65, 147, 191, 255, 290–292, 435, 696, 697, 767; pests of, in U.S.A., I. 233, 234, 297, II. 115, 132, 308, 361,

645; III. 86, 147, 248, 330, 474, 475, 559, 573, 587, 667, 669–671, 672, 673, 725.
forficalis, Pionea.
Forficula auricularia (Common Earwig), on cauliflowers, etc., in Denmark, III. 247, 699; on hops in England, II. 564; destroying vine moths in Russia, III. 211; measures against, in Russia, II. 496.
Forget-me-not, *Apocellus sphaericollis* on, in U.S.A., III. 550.
Formaldehyde, fumigation of imported potatoes with, II. 300; against thrips, II. 271; destroying tomato plants, III. 267.
Formalin, for disinfecting grain, II. 265; against Nematodes, III. 123, 177; against *Phthorimaea operculella*, III. 418; ineffective for disinfecting potatoes, I. 377; for disinfecting sugar-beet seed, II. 500; for disinfecting tea seed, II. 158; ineffective against termites, I. 477; useless against underground pests, II. 362; experiments with, as an insecticide, I. 18, III. 284.
Formic Acid, against foul-brood in bees, II. 678, III. 38.
Formica exsectoides, associated with *Thelia bimaculata* in U.S.A., III. 580.
Formica herculeana, in timber in Norway, III. 697.
Formica montana, destroying *Cacoecia* (*Archips*) *argyrospila* in U.S.A., I. 226.
Formica nigra, in Holland, III. 743.
Formica obscuriventris, associated with Aphids in U.S.A., III. 141, 580.
Formica picea, Pseudococcus sphagni in nests of, in Britain, III. 754.
Formica rufibarbis, destroying *Cydia pomonella* in Russia, III. 35.
Formica subsericea, associated with Aphids in U.S.A., I. 241, III. 141.
formicarii, Saissetia.
formicarius, Clerus; *Cylas*; *Sticticoccus*; *Thanasimus.*
formiciformis, Cephalonomyia.
Formosa, termites in, II. 190.
formosa, Achrysocharis; *Oneilella.*
formosanus, Coptotermes (*Termes*).
formosus, Dielis.
fornicata, Phytodecta.
fornicatus, Xyleborus (*Anisandrus*).
forskaleana, Tortrix.
Forsteronia floribunda, Pseudococcus filamentosus on, in East Africa, II. 146.
fossilis, Cardiococcus (*Inglisia*).
fossor, Aspidiotus.
Foul-brood, control of, in bees, I. 94, 95, 441–446, 523, 536, II. 14, 417, 530, 564, 677, 678, III. 38, 335, 592.
Four-lined Plant Bug (see *Poecilocapsus lineatus*).
Four-spotted Bean Bruchus (see *Bruchus quadrimaculatus*).
Fourcroya, legislation against introduction of, into Mauritius, I. 399.
foveicollis, Bothynoderes.
Fowls, destroying noxious insects, I. 67, 403, II. 55, 360, 373, 542, 590, 640, III. 8, 58, 59, 264, 294, 297, 371, 407, 556, 605.
Foxes, destroying *Calosoma sycophanta* in U.S.A., III. 717.
Foxglove (*Digitalis*), *Xanthoecia flavago* (*Gortyna ochracea*) on, in France and Britain, I. 410, 434.
Foxtail Grass (see *Setaria*).
fracta, Allograpta.
fractilinea, Oligia (*Hadena*).
fragaefolii, Myzus.
fragariae, Aphelencus; *Empria*; *Hyperoides*; *Macrosiphum*; *Myzus*; *Rhynchites*; *Tarsonemus*; *Tyloderma.*
fragariellum, Macrosiphum.
fragilis, Cirphis; *Malacosoma.*
France, regulations for use of arsenicals in agriculture in, II. 125, 398, 399, 400; *Aphidius avenae* parasitising Aphids in, III. 112; Aphids in, II. 17, 186, 226, 478, 620, 696; pests of artichokes in, I. 410, 420, II. 302, 606, III. 33; pests of beetroot in, I. 188, II. 89, 90, 420, 450; bird protection in, I. 291, 393; pests of cereals in, III. 428, 541, 664; experiments against the cigarette beetle in, I. 312; cochineal culture in, I. 315; financial loss due to insect pests in, III. 33; pests of figs in, III. 10; pests of flax in, III. 428; regulations for sale of fungicides and insecticides in, II. 538; pests of hyacinths in, II. 594; bionomics of *Kakothrips robustus* in, II. 395, 488, III. 279; pests of lucerne in, II. 577; miscellaneous pests in, I. 74, 102, 171, 172, 226–229, 257, 270, 295, 334, 409, 411, 423, 424, 451, 466, 472, 480, 481, 504, 533, 552, II. 14, 128, 203, 236, 270, 375, 379, 397, 420–422, 425, 449–450, 538, 556, 557, 611, 620, 621, 638, 644, 657, III. 188, 382, 503; new Ichneumonids from, III. 97; pests of olives in, I. 175, 420, II. 421; pests of onions in, II. 542; pests of orchards in, I. 227, 228, 424, 481, II. 166, 402, 419, 448, 478, 539,

623, 637, 696, III. 496, 694; pests from, imported into U.S.A., II. 386, III. 355, 454, 761; pests of peas in, I. 411, II. 395; bionomics of *Phthorimaea operculella* in, II. 400, 402; bionomics of *Platyparea poeciloptera* on asparagus in, II. 403, 404; cultivation of *Pyrethrum* in, I. 247; pests of raspberries in, II. 621; termites in, II. 657; pests of vines and their control in, I. 6, 9, 70, 71, 173, 221, 228, 229, 249, 250, 294, 315, 337, 397, 419, 422, 451, 468, 513, 523, 542, II. 9, 13, 156, 192, 194, 195–197, 228, 229, 255, 297, 376, 405, 409, 410, 411, 421, 443, 451, 510, 511, 517, 539, 550, 552, 556, 587, 588, 589, 593, 608, 609, 611, 657, 685, 687, III. 118, 188, 427, 561, 614, 615, 616.

francisca, Apate.

Frangipane (*Plumeria acuminata*), scale-insects on, in the Seychelles, II. 566.

Frankliniella, on cassava in St. Vincent, III. 367.

Frankliniella (*Euthrips*) *fusca* (Tobacco Thrips), II. 271; destroying *Tetranychus telarius* (*bimaculatus*) in U.S.A., I. 353.

Frankliniella intonosa, on leguminous plants in Britain, III. 279.

Frankliniella melanommata, on cassava in St. Vincent, II. 104, III. 411.

Frankliniella robusta (see *Kakothrips*).

Frankliniella tenuicornis, on tobacco in Russia, II. 267.

Frankliniella (*Euthrips, Haplothrips*) *tritici*, on orange in Porto Rico, II. 130; on cereals in Russia, I. 357, II. 171, III. 206, 220, 308, 401, 601; on lucerne, tomatoes, etc., in U.S.A., I. 179, 264, II. 245, III. 494, 512, 571; parasites of, II. 488; destroying *Brachycolus noxius* in Russia, III. 308.

Franklinothrips (*Euthrips*) *insularis* on roses in the W. Indies, I. 97; on *Erythrina* in Trinidad, III. 468.

Franklinothrips tenuiformis, sp. n., in Panama, III. 566.

Franklinothrips vespiformis, distribution of, in America, III. 566.

fraterculus, Anastrepha.

fraterna, Lachnosterna.

fraternus, Xyleborus.

fraxini, Cionus; Fonscolombia; Hylesinus; Phyllopsis.

fraxini-dipetalae, Pemphigus; Prociphilus.

Fraxinus (see Ash).

Fraxinus excelsior, Coccids on, in Europe, I. 221, II. 199; not attacked by *Sciaphobus squalidus* in Russia, II. 337.

Fraxinus oregona, Prociphilus fraxini-dipetalae on, in U.S.A., III. 588, 686.

Frea marmorata, on coffee in East Africa, I. 414.

frenchi, Chionaspis; Lepidiota.

frequens, Anagrus.

freseni, Empusa.

freyi, Anapus.

frigidae, Aphis.

frigidana, Olethreutes.

frigidum, Calosoma.

Fringed Scale (see *Asterolecanium pustulans*).

frischi, Anomala; Dermestes.

Frit Fly (see *Oscinella frit*).

frit, Oscinella (*Chlorops, Oscinis*).

froggatti, Brontispa.

Froghopper, Black (see *Tomaspis pubescens*).

Froghopper, Trinidad (see *Tomaspis saccharina*).

Froghopper, Yellow-banded (see *Tomaspis rubra*).

Froghopper, Yellow-sided (see *Tomaspis flavilatera*).

Frogs, destroying noxious insects, III. 371, 392.

frollowi, Mylabris.

frondosana, Earias (see *E. insulana*).

frontale, Lecanium.

frontalis, Dendroctonus; Systena.

Frontina, in Canada, I. 114.

Frontina archippivora, in bait-traps for *Ceratitis capitata*, III. 568; parasite of Lepidoptera, I. 182, 184, II. 49, 629, 630, III. 153, 363, 477.

Frosted Orange Moth (see *Xanthoecia flavago*).

frugalis, Mocis (*Remigia*).

frugiperda, Laphygma.

Fruit Fly, Cacao (see *Ceratitis punctata*).

Fruit Fly, Mediterranean (see *Ceratitis capitata*).

Fruit Scale, European (see *Aspidiotus ostreaeformis*).

Fruit-tree Bark Beetle (see *Scolytus rugulosus*).

Fruit-tree Leaf-roller (see *Cacoecia argyrospila*).

Fruit-tree Spinning-mite (see *Paratetranychus pilosus*).

frumentarium, Apion.

frumenti, Diocalandra.

frustrana, Rhyacionia (*Retinia*).

Fucus caragahen (Irish moss), decoction of, against insects, II. 335.

fugax, Prosopaea.
fuligidella, Marmara.
fuliginosum, Apion.
fuliginosus, Coeliodes; *Lasius*; *Stenocarus.*
fullawayi, Diachasma.
fulleri, Eremnus; *Pantomorus* (*Aramigus*).
Fuller's Rose Beetle (see *Pantomorus fulleri*).
fullo, Eutochia; *Polyphylla.*
fullonica, Othreis (*Ophideres*).
fulva, Prenolepis; *Xiphodiplosis.*
fulvicauda, Linnaemyia.
fulvicornis, Hoplocampa (*Selandria*).
fulvipes, Apanteles; *Emphytus* (see E. *truncatus*).
fulviventris, Homoporus.
fulvoguttata, Melanophila.
fulvohirta, Anthrax.
fulvosignata, Epilachna.
fulvus, Sparnopolius; *Smicronyx.*
fumator, Phygadeuon.
fumatus, Byturus.
fumiferana, Tortrix.
fumiferanae, Apanteles; *Conoblasta*; *Winthemia.*
Fumigation, certificate of, necessary for importation of plants into Montana, II. 29; tents for, calculation of the cubic capacity of, I. 502, III. 458; methods of, and apparatus used in, I. 85, 115, 118, 441, II. 204, 300, 531, 702, III. 347, 377, 505, 623; (see Carbon Bisulphide, Hydrocyanic Acid, Sulphur, etc.).
funebrana, Cydia (*Grapholitha*).
funebris, Bruchophagus; *Degeeria.*
funeralis, Desmia.
funereus, Morimus.
funesta, Chortophila (*Anthomyia*); *Oxythyrea* (*Leucocelis*).
Fungicides, chemistry and properties of, I. 46, II. 209, 210, 546; legislation regarding, in France, II. 538; and insecticides, mixtures of, II. 662.
Fungus, Beneficial, I. 67, 76, 77, 184, 267, 315, 401, 412, 453, 535, 544, II. 17, 47, 48, 49, 55, 62, 70, 88, 95, 126, 129, 179, 212, 216, 217, 218, 222, 227, 260, 265, 269, 282, 301, 303, 310, 317, 334, 345, 347, 356, 362, 369, 372, 376, 394, 396, 416, 422, 449, 454, 464, 482, 504, 509, 518, 563, 568, 572, 577, 583, 589, 596, 600, 612, 623, 638, 654, 671, 678, 718, III. 23, 32, 135, 154, 280, 286, 324, 367, 369, 468, 490, 497, 542, 577, 698.
Fungus, Black (see *Myriangium*).
Fungus, Brown (see *Aegerita*).
Fungus, Cinnamon (see *Verticillium*).
Fungus, Green Muscardine (see *Metarrhizium anisopliae*).
Fungus, Locust (see *Empusa grylli*).
Fungus, Red (see *Aschersonia*).
Fungus, Red Muscardine (see *Sorosporella*).
Fungus, Red-headed (see *Sphaerostilbe*).
Fungus, Shield Scale (see *Cephalosporium*).
Fungus, White Muscardine (see *Botrytis*).
Fungus, White-fringed (see *Fusarium* and *Microcera*).
Fungus, White-headed (see *Ophionectria*).
Fungus, Yellow (see *Aschersonia*).
funitectus, Chermes.
Funtumia (*Kicksia*) *elastica*, pests of, in India and Ceylon, II. 191, 192, 644; *Coccus viridis* on, in the Seychelles, I. 76; pests of, in Tropical Africa, I. 349, 414, II. 108, 415, 592, III. 167; (see Rubber).
Funtumia latifolia, pests of, in Uganda, II. 592.
funtumiae, Chionaspis; *Physothrips.*
fur, Ptinus.
Furcaspis oceanica, on coconut in the South Sea Islands, II. 3.
Furcaspis rufa, sp. n., in East Africa, II. 429.
furcata, Aphis; *Chortophila*; *Scudderia.*
furcellata, Canthecona.
furcifera, Scudderia.
furcula, Aelia.
furfura, Chionaspis.
Furniture Beetle (see *Anobium domesticum*).
Furniture Mite (see *Glyciphagus domesticus*).
furtivus, Corymbites; *Diapus.*
furunculus, Herpestomus.
Furze (see *Ulex europaeus*).
Fusarium (White-fringed Fungus), infesting *Aleurodes* in Florida, III. 23; infesting *Colias eurytheme* in U.S.A., III. 154; infesting Acarids, II. 269; (see also *Microcera*).
fusca, Arcyptera; *Busseola* (*Calamistis, Sesamia*); *Cantharis*; *Comys*; *Frankliniella* (*Euthrips*); *Lachnosterna*; *Mylabris.*
fuscata, Pochazia.
fuscator, Echthromorpha.
fuscatus, Polistes instabilis.
Fuschia, *Aulacaspis pentagona* on, I. 222.
fusciceps, Chortophila (*Pegomyia, Phorbia*); *Merothrips.*

fuscicollis, Ageniaspis ; *Encyrtus.*
fuscifrons, Aphis.
fuscilabris, Megilla.
fuscipennis, Aphelinus ; *Palaeococcus.*
fuscipes, Agrypnus.
fuscipunctella, Tinea.
fuscispinus, Carpocoris.
fuscula, Epitrix.
fuscus, Encyrtus ; *Euthrips* ; *Riptortus.*
Fusicladium, use of calcium arsenite against, III. 391.

G.

gabrieli, Tetropium.
gagates, Apanteles ; *Diplognatha.*
gahani, Pseudococcus.
galactodactyla, Alucita (*Pterophorus*).
Gale, Sweet, *Lymantria dispar* on, in U.S.A., III. 668.
galeatus, Ceroplastes.
galeopsidis, Phorodon (see *Rhopalosiphum hippophaës*).
Galeruca (*Adimonia*) *capreae*, on willow in Russia, III. 223.
Galeruca crataegi, on elms in Russia, II. 331.
Galeruca tenella, on strawberries in Sweden, III. 695.
Galerucella cavicollis, food-plants of, in Pennsylvania, III. 588.
Galerucella decora, on willow and poplar in Russia, III. 43.
Galerucella lineola, on willows in England, III. 660; in orchards in Norway, III. 108, 697; on willows in Russia, II. 36.
Galerucella luteola (Elm Leaf Beetle), distribution of, II. 644; bionomics of, in N. America, I. 15, 143, 528, II. 6, 644, III. 193, 372, 473, 515, 588, 673, 709; parasitised by *Erynnia nitida* in Europe, III. 252; in Norway, III. 697; on elms in Russia, II. 36, 45, 331, 714, III. 221.
Galerucella rufosanguinea, on fruit trees in Pennsylvania, II. 601.
Galerucella tenella, on willows in England, III. 660; on strawberries in Russia, II. 36, 718, III. 221.
Galerucella viburni, on *Viburnum opulus nana* in Holland, III. 742; on *Viburnum opulus* in Russia, II. 36.
Galerucella xanthomelaena (see *G. luteola*).
Galesus silvestrii, established in Hawaii against *Ceratitis capitata*, II. 317, III. 170, 289, 364; introduction of, into Italy, II. 86.
galii, Aphis.
Galium cruciatum, Aphis galii on, in England, III. 633.
Galium molugo, vine moths on, in Europe, I. 71, III. 210.
Galium uliginosum (Swamp Bedstraw), pests on, in Russia, III. 638.
Gall Mites (see *Eriophyes*).
gallaesolidaginis, Gnorimoschema.
Galleria mellonella (Wax Moth), distribution of, II. 379; control of, in North America, I. 275, 403, 453, II. 379, III. 732; in Argentina, II. 164; in Britain, II. 379, 564; in Portugal, I. 313; in Russia, III. 403; conveying *Nosema apis*, I. 331; natural enemies of, I. 453, 454, II. 137, 379.
gallica, Polistes.
galliformis, Kermes.
galloprovincialis, Monochamus.
Gallus gallus (Jungle Fowl), destroying locusts in the Philippines, I. 68.
Galtonia, Merodon equestris on, in England, II. 88, 246.
Galtonia candicans (Summer Hyacinth), *Tylenchus devastatrix* in, in Holland, III. 202.
Gambrus inferus, parasite of *Polychrosis botrana* in Tyrol, III. 497.
gamma, Phytometra (*Autographa, Plusia*).
gana, Tagiades.
Ganaspis, attacking *Anastrepha* in Porto Rico, I. 390.
Gangara thyrsis, on coconut in the Far East, II. 490.
gangis, Creatonotus.
Gardenia, scale-insects intercepted on, in California, III. 558, 626; *Glyphodes sericea* on, in Zanzibar, III. 125.
Gardenia florida (Cape Jasmine), *Aleurodes citri* on, in Florida, I. 186, III. 23.
Gardenia radicans, Aphis affinis var. *gardeniae* on, in Argentina, III. 55.
gardeniae, Aphis affinis.
Gargaphia solani, sp. n., bionomics of, in North America, II. 664, III. 575.
Gargara mixta, on *Tephrosia candida* in Ceylon, III. 83.
Garlic (*Allium sativum*), pests of, in Costa Rica, I. 220; *Blaniulus guttulatus* on, in France, II. 557; pests intercepted on, in Hawaii, III. 492; pests of, in Russia, III. 104, 544.
Garrulus glandarius, destroying forest insects in Germany, II. 148.

Garrulus infaustus, destroying *Dendrolimus segregatus* in Russia, II. 223.
Gas Lime, against underground pests, I. 378, II. 16, III. 107, 502.
Gas Tar, against mealy bug on vines, III. 101, 501.
Gasoline, against ants, III. 365, 412; against Aphids, II. 4, III. 511, 529; against boring beetles, I. 343, II. 174; relative attractiveness of, to *Ceratitis capitata*, III. 28; effect of, on insects, III. 692.
Gasoline Torch, use of, in destroying insects, I. 518, II. 228, III. 7.
gasteralpha, *Pulvinaria* (see *P. iceryi*).
Gasterocercodes gossypii, sp. n., on cotton in Peru, III. 273.
Gastine's Injector, for use with carbon bisulphide, II. 256, III. 164.
Gastroidea caesia, on grape vines in California, II. 555.
Gastroidea cyanea, on dock in California, III. 625.
Gastroidea polygoni, on sugar-beet in Russia, III. 542.
Gastroidea viridula, on sorrel in Russia, III. 105.
Gastropacha neustria (see *Malacosoma*).
Gastropacha pini (see *Dendrolimus*).
Gastropacha quercifolia, on pears etc. in Russia, I. 488, III. 105, 221.
Gastrophilus equi (Horse Bot-fly), in British Columbia, I. 90.
Gaylussacia spp. (Huckleberry), *Rhagoletis pomonella* on, in U.S.A. III. 57.
Gelatine, as an adhesive in sprays, I. 46, 238, 295, 548, II. 556, 588, 620, III. 254.
Gelechia gossypiella (Pink Bollworm), on cotton in tropical Africa, I. 414, II. 2, 283, 447, 580, III. 124; quarantine measures required against, in Barbados, III. 555; legislation against, in California, III. 120; measures against, on cotton in Egypt, I. 92, II. 218, 219, 319, 320, 321, 324, 508, 596, III. 505; on cotton in Hawaii, I. 374, III. 555, 581, 681; on cotton in India, III. 144; in shipments of Indian cotton in U.S.A., III. 454; warning against, in U.S.A., III. 152; parasites of, II. 320, 507, 508, 596, III. 581, 681; measures against, II. 218, 219, 324, 325.
Gelechia nanella (see *Recurvaria*).
gemella, Harmonia conglobata (see *Coccinella*).
gemellatus, Cathartus.
geminata, Eupterote; *Mylabris*; *Solenopsis*.
geminator, Zele.
geminatus, Cneorrhinus (see *C. plagiatus*); *Paniscus*.
gemmatalis, Anticarsia (*Thermesia*).
generosi, Dyodiplosis.
geniculata, Blennocampa; *Phytomyza*.
Geniocerus erythrophthalmus, I. 549.
Geniocerus juniperi, on juniper berries in U.S.A., III. 580.
Geniocerus marcovitchi, a parasite of in U.S.A., III. 580.
Geniocerus xanthopus, parasite of *Dendrolimus pini* in Germany, III. 249.
Genista, Lampides baetica on, in France, I. 411; not attacked by *Pieris brassicae* in France, I. 68.
Genista scoparia, Aulacaspis pentagona on, I. 222.
Genista triacanthos, Aulacaspis pentagona on, I. 222.
genitalana, Cnephasia.
genitalis, Chortophila (*Adia*).
gennadii, Diaspis; *Eumarchalia* (*Schizomyia*).
gentilei, Tetrastichus.
geoffroyella, Oecophora (*Harpella*).
geoffroyi, Scolytus.
Georgia, *Anthonomus grandis* and its control in, II. 91, 389, 650, III. 424; miscellaneous pests in, I. 101, 353, II. 190, III. 471, 510, 586.
georgiae, Biomyia; *Viviana*.
georgina, Sarcophaga.
Geotrogus (*Rhizotrogus*) *sicelis*, on vines, in Italy, III. 112.
Geotrupes stercorarius, in Russia, II. 110.
Geraeus perscitus, on cotton in Peru, III. 273.
Gerania bosci, on *Ficus* in Java, II. 535.
Geranium, Aulacaspis pentagona on, in Ceylon, III. 80; *Agromyza pusilla* on, in Hawaii, III. 363; pests of, in U.S.A., II. 347, III. 709.
Geranium, essence of, against vine pests, III. 211.
German Colonies, rubber pests of, II. 413, 415.
germanica, Ectobia (*Phyllodromia*); *Vespa*.
germanus, Rhyssemus (see *R. asper*).
Germany, *Aspergillus flavus* causing disease among bees in, I. 523; *Aspidiotus perniciosus*

intercepted in, II. 281; bionomics of *Hylobius abietis*, in, II. 325-328; *Leptinotarsa decemlineata* on potatoes in, II. 711, III. 712; life-history of *Sitones lineatus* in, III. 102; forest pests in, I. 239, 371-373, II. 54, 147, 235, 325-328, 375, 485, 571, 667, III. 195; fruit pests in, II. 419, 499, 563, 590, 684, III. 250, 582; pests of osiers in, II. 642; control of vine pests in, I. 156, 243, 244, 245, 392, 393, 454, 468, 529, II. 239, 329, 451, 453, 454, 486, 499, 507, 586, III. 496; miscellaneous insect pests in, I. 77, 149, 342, 410, II. 151, 168, 377, 406, 494, 499-501, 679, III. 76, 147, 185, 279, 436, 597, 607; pests from, imported into U.S.A., III. 354, 469; protection of insectivorous birds in, I. 393, 479, II. 147-149, 529, 595; Applied Entomology in, I. 108, III. 239; use of arsenicals as insecticides forbidden in, II. 195; use of lime-sulphur in, II. 209-211; *Phylloxera* introduced into S. Russia from, II. 167.

germari, Aelia (see *A. cognata*).

gerstaeckeri, Dicasticus; *Mimopacha*.

Gerstaeckeria clathrata, on cactus in U.S.A., I. 82.

Gerstaeckeria hubbardi, recommended to be introduced into Queensland against prickly pear, III. 126.

Gerstaeckeria porosa, on cactus in U.S.A., I. 82.

gestroi, Coptotermes (*Termes*).

Geum urbanum, not a food-plant of *Acyrthosiphon pisi*, III. 702, 704.

Giant Moth-borer (see *Castnia licus*).

Giant Spruce Aphis (see *Lachnus piceae*).

Giant Willow Aphis (see *Lachnus viminalis*).

Giant Wood Wasp (see *Sirex gigas*).

gibba, Eurytoma.

gibbipennis, Cassida.

gibbosus, Ligyrus.

gibbus, Bruchophagus (*Eurytoma*); *Zabrus*.

Gibraltar, biscuits destroyed by *Ephestia kühniella* in, I. 292.

gibsoni, Gonatocerus.

gideon, Xylotrupes.

Gidgei (see *Acacia cambagei*).

gidgei, Aspidiotus.

giffardi, Ceratitis; *Dinaspis*; *Dirhinus*; *Serangium*; *Tetrastichus*.

gigantea, Pachytoma.

giganteus, Aspidoproctus; *Rhynchites*.

gigas, Echinorhynchus; *Fiorinia*; *Petrognatha*; *Sirex*.

gillettei, Euceraphis.

Gingelly Plant (see *Sesamum indicum*).

Ginger, *Lasioderma serricorne* breeding in, I. 170.

Gingko, not attacked by *Aspidiotus perniciosus*, I. 472.

Gipsy Moth (see *Lymantria dispar*).

giraulti, Oligosita; *Signiphora*.

girodi, Thaneroclerus.

Gishurst Compound, against *Pseudococcus citri* on vines, II. 101.

Gitonides perspicax, gen. et sp. n., parasite of *Pseudococcus* sp. in Hawaii and the Philippines, III. 247.

glaber, Citromyces; *Lophococcus*.

glaberrima, Lonchaea.

glacialis, Hippodamia.

Gladiolus, Aphids intercepted on, in Hawaii, III. 657.

glandulosa, Prosopis.

Glareola melanogaster (Small Locust Bird), in S. Africa, II. 574.

Glareola melanoptera, destroying locusts in S. Africa, III. 720.

glasgowi, Cyrtogaster.

Glassy Star Scale (see *Vinsonia stellifera*).

glauca, Metadrepana.

Gleditschia ferox, Aulacaspis pentagona on, I. 221.

Gleditschia triacanthos, Aphis leguminosae on, in Africa, III. 749; not attacked by *Sciaphobus squalidus* in Russia, II. 337.

Glenea, on cacao, in the Gold Coast, II. 141, III. 528; on cacao in Java, I. 3.

Glenea novemguttata, bionomics of, in Java, III. 661.

Gliricidia maculata, Duomitus punctifer on, in Barbados, III. 173.

globata, Ripersia.

globosa, Epilachna.

globulosus, Pemphigus.

Gloeosporium, infesting bananas in Queensland, II. 511.

glomeratus, Apanteles.

Glottula dominica (see *Brithys crini*).

gloveri, Lepidosaphes; *Samia*; *Tetranychus* (see *T. telarius*).

Glucose, as a bait for *Dacus oleae*, II. 289, 479.

Glue Bush, *Dacus cucurbitae* on, in Hawaii, III. 29.

Glycine hispida (see Soy Bean).

Glycine soja, not attacked by *Maruca testulalis* in Java, III. 248.

Glyciphagus domesticus (Furniture Mite), in furniture in England, II. 564.

Glyciphana versicolor, on coconut in the South Sea Islands, II. **2.**
Glycosmis pentaphylla, Papilio demodocus on, in the Belgian Congo, III. **650.**
glycyphaga, Opogona.
Glyphe viridescens, parasite of *Agrotis unicolor* in U.S.A., III. **371.**
glyphica, Euclidia ; *Gonospileia.*
Glyphodes indica, on cotton in the Far East, II. **491.**
Glyphodes laticostalis, on *Hilarrhena antidysenterica* in India, III. **723.**
Glyphodes ocellata, on *Funtumia* in Tropical Africa, I. **415,** II. **108, 142, 415, 592,** III. **166.**
Glyphodes sericea, on gardenia in Zanzibar, III. **125.**
Glypta animosa, parasite of *Polychrosis viteana* in U.S.A., I. **112.**
Glypta brevis, sp. n., parasite of *Cydia pomonella* in U.S.A., III. **418.**
Glypta vulgaris, parasite of *Polychrosis viteana* in U.S.A., I. **112.**
Glyptoscelis pubescens, on apples in Br. Columbia, I. **91,** II. **676** ; on pears in California, II. **555.**
Gnathocerus cornutus, infesting flour, I. **293** ; in grain in Russia, II. **40.**
Gnathocerus (*Echocerus*) *maxillosus*, in maize in West Africa, II. **490.**
Gnathotrichus, on Conifers in Canada, I. **407.**
Gnathotricus occidentalis, on *Pinus ponderosa* in South Dakota, I. **51.**
Gnathotrichus retusus, on Conifers in Br. Columbia, III. **3.**
Gnathotricus sulcatus on Conifers in Br. Columbia, III. **3** ; on *Pinus ponderosa* in South Dakota, I. **51.**
gnava, Carcelia ; *Chortophila.*
gnidiella, Cryptoblabes (*Ephestia*).
Gnophos obscuraria, on lettuce in France, I. **504.**
Gnophos pullata, on lettuce in France, I. **504.**
Gnophothrips megaceps, sp. n., in Florida and Louisiana, III. **631.**
Gnorimoschema gallaesolidaginis, not parasitised by *Calliephialtes messor*, II. **138.**
Gnorimus nobilis, in Russia, II. **110.**
Goat Moth (see *Cossus cossus*).
Goatsuckers, destroying *Dendrolimus pini* in Russia, II. **222,** III. **392.**
Godara comalis (see *Crocidolomia binotalis*).
Golaz Mixture, against vine pests, II. **239, 240, 451, 681, 683.**
Gold Coast, insect pests of, II. **141, 142, 670, 671, 672,** III. **168, 528, 663, 748** ; new parasites from, I. **388,** III. **433, 434, 444** ; Coccidae of, II. **276, 410** ; termites from, II. **610** ; ordinance regarding pests of cacao and rubber in, II. **278** ; *Characoma stictigrapta* bred from kola fruit in, II. **107** ; *Ceratitis* spp. from, I. **91, 247.**
Gold-tailed Moth (see *Euproctis auriflua*).
Golden-crested Wren, destroying insects in Switzerland, I. **478.**
Golden Glow (see *Rudbeckia*) .
Golden Mealy Bug (see *Pseudococcus aurilanatus*).
Golden Oak Scale (see *Asterolecanium variolosum*).
Golden Oriole (see *Oriolus galbula*).
Golden Rod (see *Solidago*).
Gomphocarpus fructicosus, Myzus asclepiadis on, in Africa, III. **749.**
Gomphocerus antennatus, in Russia, III. **636.**
Gomphocerus pallidus, in Russia, III. **636.**
Gomphocerus rufus, destroyed by *Mylabris* in France, III. **40.**
Gomphocerus sibiricus, bionomics and control of, in Russia and Siberia, II. **198, 475,** III. **109, 437.**
Gonatocerus brunneus, parasite of *Aphis avenae* in U.S.A., II. **697.**
Gonatocerus gibsoni, parasite of *Draeculacephala mollipes* in U.S.A., III. **577.**
Gonatopus contortulus, parasite of *Eutettix tenella* in U.S.A., III. **557.**
gongylophora, Rozites.
Gonia, I. **114,** II. **528** ; parasite of *Feltia exclamationis* and *Euxoa segetum* in Russia, III. **536.**
Gonia capitata, parasite of *Euxoa segetum* in Russia, I. **462, 540,** II. **212.**
Gonia crassicornis, parasite of *Laphygma frugiperda* in Porto Rico, I. **182, 184,** II. **49,** III. **477.**
Goniocerus sp. n., parasite of *Chrysopa* in Canada, III. **25.**
Goniomima (*Belvosia*) *unifasciata*, parasite of cutworms in U.S.A., III. **371, 458.**
Gonitis (see *Anomis*).
Gonocephalum (*Opatrum*) *pusillum*, in market-gardens in Russia, III. **221.**
Gonocephalum simplex (*Opatrum aequale*), on tobacco in Nyasaland, II. **277** ; bionomics of, in Rhodesia, I. **289,** II. **706.**
Gonodontis bidentata, on Conifers in Britain, I. **119.**
Gonospileia glyphica, parasitised by *Trichogramma* in Russia, III. **641.**
gonostigma, Orgyia.

Gooseberry (*Ribes grossularia*), Aphids on, II. 152, 208, 406, 509; pests of, in Britain, I. 236, 237, 245, II. 8, 563, III. 74, 304, 676, 715; pests of, in Canada, I. 413, II. 217, 432, 512, III. 68, 554, 629; pests of, in France, I. 68, 71, II. 621, 622; *Zophodia convolutella* on, in Holland, III. 199; pests of, in Italy, III. 124; pests of, in Norway, III. 108; pests of, in Russia, I. 206, 440, II. 36, 337, 341, 369, 370, 480, III. 41, 45, 50, 99, 210, 220, 223, 225, 389, 535, 606, 610, 640, 642; mites on, in Sweden, II. 169; pests of, in U.S.A., I. 141, 277, 425, 476, 515, II. 188, 208, 380, 390, 459,509, 510, 710, III. 15, 182, 258, 373, 457, 515.
Gooseberry Clearwing (see *Aegeria tipuliformis*).
Gooseberry Fruit Worm (see *Zophodia grossulariae*).
Gooseberry Gall Midge (see *Rhopalomyia grossulariae*).
Gooseberry Mite (see *Bryobia praetiosa*).
Gooseberry Sawfly (see *Pteronus ribesii*).
Goosefoot (see *Chenopodium*).
Goose-grass (see *Eleusine indica*).
Gordius, parasite of locusts in the Philippines, II. 126.
gorgone, Charidryas.
Gortyna ochracea (see *Xanthoecia flavago*).
Goryphus, parasite of *Acrocercops cramerella* in Java, I. 57.
Gossyparia spuria (European Elm Scale), in North America, I. 140, 400, II. 663, III. 43, 465, 515, 584, 625; on elm in Russia, I. 488, III. 610.
Gossyparia ulmi (see *G. spuria*).
gossypiella, Gelechia; *Pyroderces* (*Stagmatophora*) (see *P. simplex*).
gossypii, Acyrthosiphon; *Aphis*; *Contarinia*; *Corythuca*; *Earias*; *Eriophyes*; *Gasterocercodes*; *Sphenoptera*; *Tychius.*
gossypinus, Oxycarenus.
Gossypium (see Cotton).
Gossypium herbatium, unaffected by *Tetranychus telarius* in Russia, II. 313.
Gossypium hirsutum, effect of *Tetranychus telarius* on, in Russia, II. 313.
Gossypium neglectum, not attacked by *Gelechia gossypiella* in India, III. 144.
Gossypium peruvianum (Tree Cotton), *Hemichionaspis minor* on, in Peru, I. 157.
Gouldia coriacea, Aristotelia elegantior on, in Hawaii, III. 681.
Gourds, *Dacus vertebratus* on, in Zanzibar, III. 125.
Gourliea decorticans, Aspidiotus cyanophylli on, in Chile, I. 138.
gowdeyi, Aspidiotus; *Stictococcus*; *Telenomus*; *Tetrastichus.*
Gracilaria, on coffee and cotton in E. Africa, I. 414; on pigeon-pea in Br. Guiana, I. 343; parasitised by *Omphale metallicus* in Hawaii, III. 681; on cotton in Nyasaland, II. 277.
Gracilaria azaleae (see *G. zachrysa*).
Gracilaria azaleella (see *G. zachrysa*).
Gracilaria coffeifoliella, on coffee in Réunion, parasites of, II. 216.
Gracilaria complanella (see *Tischeria*).
Gracilaria elotella, in U.S.A., II. 132.
Gracilaria fasciella, in U.S.A., II. 132.
Gracilaria juglandella, on walnut in Russia, III. 206.
Gracilaria syringella, bionomics of, in England, III. 718, 719; on *Syringa* in Holland, III. 741; on lilac in Russia, III. 224, 543, 606, 610.
Gracilaria violacella, on *Desmodium* in North America, I. 343.
Gracilaria zachrysa, on azaleas in Belgium, III. 513; imported into U.S.A. on azalea, III. 117, 199, 463, 469, 475, 589; synonyms of, III. 463.
gracilipes, Gryllus; *Paniscus*; *Rhyncholophus.*
gracilis, Anaphes; *Bregmatothrips*; *Clerome*; *Limneria*; *Magdalis*; *Mesostenus*; *Taeniocampa*; *Taphrocerus*; *Xenoschesis.*
Grackles, destroying *Lachnosterna* in U.S.A., III. 249.
graecarius, Biston.
Graeffea cocophaga, on coconut, distribution of, II. 691; on coconut in the South Sea Islands, II. 3.
graellsii, Acontia.
Grain Crops, pests of, in Austria-Hungary, II. 453, 526; pests of, in Canada, II. 24, 381, III. 69, 75, 327, 629; pests of, in Germany, II. 500; pests of, in Russia, I. 357, II. 34, 170, 265, 314, 370, 371, 372, 473, 502, 514, 526, 677, 712, 716, III. 4, 45, 46, 47, 67, 103, 183, 220, 307, 481, 483, 636; *Tettigonia albifrons* on, in Sicily, III. 40; pests of, in U.S.A., II. 361, 536, 537, 555, III. 85, 262, 335, 352, 370, 466, 708; (see also Wheat, etc.).

Grain, Stored (see Cereals, Stored).
Grain Aphis (see *Aphis avenae*).
Grain Moth, Angoumois (see *Sitotroga cerealella*).
Grain Thrips (see *Frankliniella tritici*).
Grain Weevil (see *Calandra granaria* and *C. oryzae*).
Gram (see *Phaseolus*).
Grama Grass, *Diatraea saccharalis* on, in U.S.A., III. **184.**
Gramang Ant (see *Plagiolepis longipes*).
graminea, Diabrotica.
graminicola, Chlorophanus.
graminis, Chareas (see *Tholera popularis*); *Rhizobius*; *Sipha*; *Tetraneura.*
graminivora, Mahasena.
graminum, Pediculopsis (*Pediculoides*); *Stenothrips*; *Toxoptera.*
Grammodes algira, parasitised by *Trichogramma semblidis* in Russia, I. **432.**
Grammodes (*Chalciope*) *geometrica,* on rice in Far East, II. **489.**
Granadilla (*Passiflora edulis*), *Ceratitis capitata* on, in Java, III. **3**; *Dichocrocis punctiferalis* on, in Queensland, II. **20**; a trap fruit for *Ceratitis capitata* in Bermuda, I. **164.**
granaria, Calandra.
granarium, Macrosiphum.
granarius, Bruchus.
Granary Weevil (see *Calandra granaria* and *C. oryzae*).
grandicollis, Ips.
grandiosella, Diatraea.
grandis, Anthonomus; *Exorista.*
granella, Tinea.
granellus, Perideraeus.
graniceps, Coccotrypes.
granulatus, Agrilus; *Carabus.*
Grape Berry Moth (see *Polychrosis viteana*).
Grape Cane Borer (see *Amphicerus bicaudatus*).
Grape Flea-beetle (see *Haltica chalybea*).
Grape Fruit (*Citrus decumana*), pests intercepted on, in California, III. **420, 494, 558, 625**; *Ceratitis capitata* on, in Hawaii, I. **374,** III. **567**; scale-insects on, in Jamaica, II. **78**; pests of, in U.S.A., I. **325,** II. **77, 435,** III. **325, 457**; *Apate* (*Bostrychus*) *monacha* on, in Porto Rico, I. **389**; (see also Pomelo.
Grape Leaf-folder (see *Desmia funeralis*).
Grape Leaf-hopper (see *Typhlocyba comes*).
Grape Leaf Mite (see *Eriophyes vitis*).
Grape Phylloxera (see *Phylloxera vastatrix*).
Grape Plume Moth (see *Oxyptilus periscelidactylus*).
Grape Pyralis (see *Sparganothis pilleriana*).
Grape Scale (see *Aspidiotus uvae*).
Grape Tiger Moth (see *Apantesis arge*).
Grape-vine (see Vine).
Grape-vine Leaf-hopper (see *Typhlocyba comes*).
Grape, Wild, pests of, in U.S.A., II. **134, 135, 599,** III. **672.**
graphipterus, Eucactophagus.
Grapholitha, on peas in Denmark, III. **246, 698.**
Grapholitha caryae (see *Cydia caryana*).
Grapholitha dorsana (see *Cydia*).
Grapholitha funebrana (see *Cydia*).
Grapholitha minutana (see *Enarmonia*).
Grapholitha nanana (see *Enarmonia*)
Grapholitha nigricana (see *Cydia*).
Grapholitha ocellana (see *Eucosma*).
Grapholitha pisana (see *Cydia*).
Grapholitha rufimitrana (see *Enarmonia*).
Grapholitha schistaceana (see *Argyroploce*).
Grapholitha tedella (see *Eucosma*).
Grapholitha wöberiana (see *Enarmonia*).
grapholithae, Calliephialtes.
Graphosoma italicum, in Russia, III. **6, 45.**
Graphosoma lineatum, parasites of, in Russia, I. **449**; in the Urals, III. **6.**
Graptolitha (*Xylina*) *bethunei,* predaceous on *Malacosoma disstria* in Canada, III. **553.**
Grass Bill Bug (see *Sphenophorus parvulus*).
Grasses, Aphids on, II. **80, 252, 406, 677, 697,** III. **9**; locusts on, I. **459,** II. **110, 134,** III. **467**; pests of, in S. Africa, II. **153, 154**; pests of, in Austria, II. **429, 453, 590**; *Mocis repanda* on, in Brazil, II. **627**; *Odonaspis* imported on, from Brazil, III. **455**; pests of, in Britain, I. **434,** II. **8,** III. **9**; *Eupterote geminata* on, in Ceylon, III. **61**; *Blissus leucoptera* on, in Canada, I. **401,** II. **469**; *Trichogramma minutum* probably introduced into Europe with, III. **301**; pests of, in France, II. **425, 606**; *Tipula* on, in Holland, III. **200**; pests of,

in India, I. 344, II. 68, 139, 169, 170, 487; pests of, in Java, I. 169; pests of, in New Zealand, III. 706, 707, 721; *Hepialus lupulinus* on, in Norway, III. 107; *Cirphis loreyi* on, in Rhodesia, III. 360; pests of, in Russia, I. 446, 484, II. 197, 331, 371, 712, III. 103, 111, 227, 308; pests of, in U.S.A., II. 46, 62, 225, 281, 436, III. 85, 263, 264, 352, 370, 631; pests of, in the West Indies, I. 253, 526, II. 62, 430.
Grass Thrips (see *Anaphothrips striatus*).
Grass-tree (see *Xanthorrhoea*).
Grasshoppers, birds destroying, I. 17, 305, II. 88, 148, 307, 576, 585, 709; bacterial and fungus infections of, I. 453, II. 461, 462, III. 24; on tomatoes in Florida, III. 179; legislation against, in Br. Guiana, III. 175; natural enemies of, I. 412, III. 81, 249, 263, 297, 328, 379, 452, 566; measures against, I. 344, 412, 421, 453, II. 60, 114, 209, 249, 302, 447, 518, 519, 541, 542, III. 63, 262, 293, 297, 327, 328, 415, 426, 450, 466.
grassii, Pseudococcus.
gravans, Tetrastichus.
gravelyi, Xyleborus.
gravicornis, Pemphigus.
gravidus, Xyleborus.
gravipes, Exochus.
grayanus, Calloodes.
Greasewood (*Adenostoma fasciculatum*), pests of, in California, I. 177, II. 553.
Greasy Cutworm (see *Agrotis ypsilon*).
Great Basin Tent Caterpillar (see *Malacosoma fragilis*).
Great Britain (see British Isles).
Greece, miscellaneous pests in, I. 167, 392, 409, 446, II. 196, 360, 466, III. 94.
Greedy Scale (see *Aspidiotus rapax*).
Green Apple Aphis (see *Aphis pomi*).
Green Dock Beetle (see *Gastroidea cyanea*).
Green Fruit Worm (see *Xylina antennata*).
Green Gram (see *Phaseolus mungo*).
Green Mangel Aphis (see *Rhopalosiphum betae*).
Green Muscardine Fungus (see *Metarrhizium anisopliae*).
Green Oak Tortrix (see *Tortrix viridana*).
Green Peach Aphis (see *Rhopalosiphum dianthi*).
Green Pug Moth (see *Chloroclystis rectangulata*).
Green Scale (see *Coccus viridis*).
Green Soldier Bug (see *Nezara hilaris*).
Green Spruce Aphis (see *Aphis abietina*).
Greenbriar, Lepidoptera on, in Connecticut, III. 372.
Greenheart (*Nectandra rodiaei*), not attacked by termites in U.S.A., III. 379.
Greenhouse Leaf-tier (see *Pionea rubigalis*).
Greenhouse Spinning Mite (see *Tetranychus althaeae*).
Greenhouse Whitefly (see *Aleurodes vaporariorum*).
greeni, Bracon; Chrysomphalus; Eriococcus; Lachnodius; Pulvinaria.
Greenland, *Psylla groenlandica* in, II. 125.
Grenada, I. 198; insect pests of, I. 254, II. 62, 87, 88, 284, 693, III. 22, 73, 582, 662, 749; prohibition of importation of sugarcane into, II. 531; fungi attacking scale-insects in, III. 583.
Grevillea (Australian Oak, Silk Oak), *Apate* on, in E. Africa, II. 570; *Pseudococcus bakeri* on, in California, II. 247; pests of, in Ceylon, II. 151, 306, 513.
Grevillea robusta, Stauropus alternus on, in Ceylon, III. 123; *Asterolecanium pustulans* on, in Porto Rico, III. 518.
Grey Moth Borer (see *Characoma stictigrapta*).
Grey Scale (see *Targionia vitis*).
grisea, Pentatoma.
Griselinia littoralis, Fiorinia morrisi on, in New Zealand, III. 721.
grisella, Achroia (*Meliphora*).
griseola, Hydrellia; Leucopis.
griseovariegata, Panolis (see *P. flammea*).
grisescens, Mylabris (see *M. impar*).
griseus, Ophonus; Peritelus; Sitones; Trachynotus.
groenlandica, Psylla.
grossepunctatus, Scapanes.
grossorum, Blastophaga.
grossulariae, Aphis; Emphytus; Eriosoma (*Schizoneura*) (see *E. ulmi*); *Mesoleius; Rhopalomyia; Zophodia.*
grossulariata, Abraxas.
grossum, Stethophyma (*Mecostethus*)
grossus, Ptyelus.
Ground Elder (see *Sambucus ebulus*).
Ground Nut (*Arachis hypogaea*), *Ephestia elutella* in cakes of, in France, III. 382; pests of, in

India, I. 344, 482; pests of, in Nigeria, III. 166; *Prodenia litura* on, in the Philippines, I. 482; *Phytomyza geniculata* on, in Russia, II. 425; pests of, in Senegal, II. 549; III. 726; pests of, in St. Vincent, II. 143, 144, III. 22.
Grouse, destroying *Sitones hispidulus*, III. 380.
Gru-gru Beetle (see *Rhynchophorus palmarum*).
Gru-gru Palm (see *Acrocomia sclerocarpa*).
Gryllotalpa, on tea in Trans-Caucasia, III. 65.
Gryllotalpa africana, on cacao and coffee in E. Africa, I. 49, 246, 414, II. 59, 592, III. 663, 752.
Gryllotalpa gryllotalpa (*vulgaris*) (European Mole Cricket), on asparagus in Argentina, II. 593; control of, on crops in France, I. 256, 308, 504, II. 255, 420, 542, 595; measures against, in Italy, II. 628, III. 151; introduced into New Jersey, III. 761; control of, in Russia, I. 460, 496, 536, II. 42, 51, 52, 170, 442, 713, III. 44, 51, 52, 66, 74, 75, 101, 104, 119, 172, 343, 393, 398, 401, 442, 443, 601, 606, 610, 613, 641, 701.
Gryllotalpa vulgaris (see *G. gryllotalpa*).
Gryllus, on rubber, etc., in East Africa, I. 246, 414; destroying *Blissus leucoptera* in U.S.A., II. 227.
Gryllus bimaculatus, on cacao and coffee in Uganda, II. 59, 591, 592, III. 752.
Gryllus conspersus, on Ceara rubber in Africa, II. 415; on rubber in Kamerun, I. 349.
Gryllus gracilipes, on cacao and coffee in Uganda, II. 592, III. 663, 752.
Gryllus pennsylvanicus, poisoned bran mash against, in U.S.A., III. 450.
gryphipenella, *Coleophora*.
Guacamaya francesca, *Asterolecanium* intercepted on, in California, III. 495.
Guadeloupe, insect pests in, I. 351, II. 602, 693, III. 365.
Guam, insect pests in, III. 373.
Guama, *Myrmelachista ambigua ramulorum* on, in Porto Rico, I. 389.
Guatemala, insect pests in, I. 316, 325, II. 92; pests from, imported in avocado seeds into U.S.A., III. 455.
Guava (*Psidium guayava*), I. 196, II. 243; *Chalcoides junodi* on, in S. Africa, I. 303; *Anastrepha ludens* intercepted on, in California, III. 623, 626; *Xyleborus fornicatus* on, in Ceylon, II. 513; *Anastrepha striata* on, in Costa Rica, I. 321; *Chrysomphalus aonidum* on, in Egypt, II. 605; *Helopeltis* on, in the Gold Coast, II. 671; *Helothrips rubrocinctus* on, in Dutch Guiana, III. 662; *Ceratitis capitata* on, in Hawaii, I. 374, II. 578; *Arbela tetraonis* on, in India, III. 300; *Anastrepha peruviana* on, in Peru, I. 516; *Dichocrocis punctiferalis* on, in Queensland, II. 20; *Ceroplastes vinsoni* on, in Réunion, II. 216; *Argyroploce leucotreta* on, in Rhodesia, III. 618; pests of, in Uganda, II. 59, III. 288; pests of, in U.S.A., II. 436, III. 326; pests of, in the West Indies, I. 99, 165, 343, 390, II. 50, 691, III. 73, 662.
Guelder Rose (*Viburnum opulus*), *Clysia ambiguella* on, in Russia, III. 210.
Guerbal, experiments with, against Aphids, I. 376.
guerini, *Chlorops*.
Guernsey, *Aphis rumicis* in, I. 77.
Guiana, British (see British Guiana).
Guiana, Dutch (see Dutch Guiana).
Guiana, French, new Braconids from, II. 346; new Coccids from, II. 353, 354; *Oecodoma cephalotes* in, II. 223, 224.
Guignardia bidwilli (Black-rot Fungus), spraying against, II. 550, 587, III. 522.
Guinea, *Hypothenemus eruditus* on cotton in, I. 351.
Guinea, French, *Ceratitis* in, I. 91, 97; search for parasites of *Ceratitis capitata* in, II. 316; termites from, II. 610; *Zeteticontus abilis*, sp. n., from, III. 433.
Guinea-corn (see Sorghum).
Guinea-fowl, destroying noxious insects, II. 88, III. 556.
Guinea Grass, *Mocis* (*Remigia*) *repanda* on, in Brazil and West Indies, II. 627, III. 556.
Guinea Grass Moth (see *Mocis repanda*).
Guiraca caerulea, destroying insects, in U.S.A., II. 709.
Gulls, destroying insects, I. 378, III. 249.
Gums, *Lymantria dispar* on, in U.S.A., III. 668.
Gunda, on *Ficus* in Java, III. 313.

Gunworm (see *Sciapteroregalen*).
guppyi, Tomaspis.
gurgistanus, Agriotes.
gutta, Phytometra (*Plusia*).
guttata, Parnara.
guttatus, Monochamus.
guttiger, Bracon.
guttulatus, Blaniulus (*Julus*); *Scymnus.*
guyanensis, Henicospilus.
Gymnocladius dioica, Aulacaspis pentagona on, I. 221.
Gymnogaster buphthalma, on sugar-cane in Mauritius, I. 31.
Gymnonychus appendiculatus (American Currant Moth), in Missouri, III. 181.
Gynaikothrips karnyi, sp. n., on black pepper in Ceylon, II. 193.
Gynaikothrips uzeli, on tobacco in Porto Rico, II. 130.
Gypona flavilineata, on Japanese barberry in U.S.A., III. 373.
Gypsonoma dealbana, on oaks in Britain, II. 619.
Gypsophila, Hypera arator on, in Holland, III. 743.
Gypsophila elegans, not attacked by *Exomias pellucidus* in Britain, III. 288, 564.
Gypsum, as an insecticide, II. 58, 448, 500, III. 211.
Gyrococcus flaccidifex, said to cause wilt disease in gipsy moth, I. 34; wilt disease in caterpillars not due to, II. 101.
Gyrolasia, synomym of *Pteroptrix,* I. 549.
Gyrophaena manca, predaceous on *Taeniothrips pyri* in California, III. 463.
gysselinella, Cedestis.

H.

Habranthus, Merodon equestris on, in England, II. 88, 246.
Habrobracon, parasite of *Chloridea obsoleta* in Russia, II. 423.
Habrobracon hebetor, parasite of Lepidoptera in Hawaii, III. 682.
Habrobracon plotnikovi, hosts of, in Russia, II. 424.
Habrobracon simonovi, parasite of *Chloridea obsoleta* in Turkestan, II. 515.
Habrocryptus alternator, parasite of *Polychrosis botrana* in Italy, III. 497.
Habrocryptus punctiger, parasite of *Polychrosis botrana* in Italy, III. 497.
Habrocytus, parasite of *Cassida vittata* in Italy, III. 6.
Habrocytus acutigena, hyper-parasite of *Polychrosis botrana* in Tyrol, III. 497.
Habrocytus indagans, sp. n., probably parasite of *Eurytoma oleae* in Eritrea, III. 432.
Habrocytus medicaginis, sp. n., on lucerne infested with *Bruchophagus funebris* in California, III. 151.
Habrocytus piercei, parasite of *Anthonomus grandis* in U.S A., III. 425.
Habrocytus punctiger, parasite of *Polychrosis botrana* in Tyrol, III. 497.
Habrocytus rosae, bred from roses in New York, III. 724.
Habrolepis oppugnati, sp. n., parasite of *Aspidiotus oppugnatus* in Eritrea, III. 432.
Hackberry, little attacked by *Lymantria dispar* in U.S.A., III. 669; recommended to be removed for control of *L. dispar,* II. 711.
Hadena arctica (see *Parastichtis*).
Hadena basilinea (see *Trachea*).
Hadena devastatrix (see *Sidemia*).
Hadena fractilinea (see *Oligia*).
Hadena monoglypha (see *Parastichtis*).
Hadena oleracea (see *Polia*).
Hadena (*Dargida, Eupsephopactes*) *procincta* (Olive-green Cutworm), in Canada, II. 677, III. 629; in meadow lands in Oregon, III. 264.
Hadena secalis (see *Trachea*).
Hadena turbulenta (see *Trachea*).
Hadronotus carinatifrons, parasite of *Anasa tristis* in Texas, I. 162.
Hadronotus (*Telenomus*) *howardi,* parasite of *Lymantria dispar* in Russia, I. 362, 481, II. 198, 275, 334.
Haematis virginiana, Noctuid larvae on, in France, III. 345.
Haemerosia renalis, on lettuce in France, I. 504.
haemorrhoidale, Acanthosoma.
haemorrhoidalis, Heliothrips (*Thrips*); *Omocestus* (*Stenobothrus*); *Pullus* (*Scymnus*); *Sarcophaga.*
hageni, Conventzia.
hagenowi, Tetrastichus.
Hair Snakes, infesting grasshoppers in U.S.A., III. 466.
Haiti, *Eriopus floridensis* in, II. 92.
haitiensis, Eutermes.
Hakea ilicifolia, Lichtensia hakearum on, in Australia, III. 750.
hakearum, Lichtensia.
Halia wavaria (see *Thamnonoma*).
Halias prasinana (see *Hylophila*).
Hallidaya, III. 17.
Halmilla (see *Berrya ammonilla*).

Haltica, on beet, vines, etc., in France, I. **173, 227, 311, 312**; II. **400, 421, 443, 611**; on crops in Russia and Siberia, II. **37, 45**, III. **172, 338, 635, 701**; remedies against, on vines in U.S.A., II. **459**; failure of *Perilitus brevicollis* to control, II. **593**; experiments with *Sporotrichum globuliferum* against, I. **228, 524**; destroyed by tits, II. **229**.

Haltica ampelophaga (Vine Flea-Beetle), on vines in Algeria, II. **446, 608**; bionomics and control of, on vines in France, II. **194, 209, 362, 552, 553, 588, 608**, III. **522**; on vines in Italy, III. **112**; on vines, etc., in Russia, I. **487**, II. **211, 355, 468**, III. **538**; on vines in Spain, II. **608**; infested with *Beauveria globulifera*, II. **310**.

Haltica bimarginata (Alder Flea-Beetle), on alder, willow, etc., in Canada and U.S.A., I. **142, 298**, III. **494**.

Haltica chalybea, on vines in Canada, I. **298, 405**, II. **664**, III. **552**.

Haltica engstromi, distribution and bionomics of, II. **100**.

Haltica erucae, L., on oaks in Russia, III. **601**.

Haltica erucae, Ol. (see *H. quercetorum*).

Haltica euphorbiae, on flax in France, III. **428**; on wheat in Russia, III. **601**.

Haltica evicta (Bronze Flea-Beetle), I. **299**.

Haltica foliacea, on fruit in U.S.A., III. **328, 512**.

Haltica ignita, on fruit in U.S.A., I. **298**.

Haltica nemorum (see *Phyllotreta*).

Haltica oleracea, control of, in Italy, III. **12**; on crops in Russia, I. **210, 395**, II. **43**, III. **204, 205, 402, 538, 542, 606**.

Haltica pagana, on strawberries in Victoria, I. **514**.

Haltica quercetorum, food-plants of, in Russia, I. **488**, III. **46, 402, 601**.

Haltica tamaricis (see *H. erucae*, L.).

Haltica vittula (see *Phyllotreta*).

Haltica Funnel, for collecting insect pests, II. **449, 478, 607, 608, 609**.

Haltichella perpulchra, parasite of *Agrotis unicolor* in U.S.A., III. **371**.

Halticoptera, sp. n., parasite of *Oscinella frit* v. *pusilla* in Russia, III. **47**.

Halticoptera daci, parasite of *Dacus oleae* in Eritrea, III. **173, 432**.

Halyzia (*Vibidia*) *duodecimguttata*, mycophagous habits of, in Italy, III. **430**.

Halyzia quatuordecimpunctata, bionomics of, on corn in Russia, I. **457**.

Halyzia (*Thea*) *vigintiduopunctata*, mycophagous habits of, III. **92, 430**; predaceous on Aphids in Russia, III. **220**; on lucerne in Russia, I. **527**, II. **395**; bionomics of, in Sicily, II. **150**.

hamadryas, *Chermes*.

Hamamelistes betulinus, migrations of, in Germany, II. **406**.

hammari, *Pachyneuron*.

hammondi, *Canarsia*.

hampei, *Stephanoderes*.

Haplocnemia (*Mesosa*) *curculionoides*, on fig, etc., in France, III. **10**; on nuts in Russia, III. **206**.

Haplocnemia myops, on apple in Astrachan, III. **221**.

Haplocnemia nebulosa, on nuts in Russia, II. **672**.

Haplophyton cimicidum, decoction of, against *Anastrepha ludens*, III. **37**.

Haplothrips (*Anthothrips*) *aculeatus*, bionomics of, on crops in Russia, I. **214, 487**, II. **33, 170, 267, 370**, III. **223, 309, 481**; on rye in Denmark, III. **698**.

Haplothrips aculeatus kurdjumovi, destroying eggs of *Sciaphobus squalidus* and Aphids, II. **338**.

Haplothrips bellis, sp. n., on grass in Florida and Louisiana, III. **631**.

Haplothrips statices, on red clover in Montana, II. **536**.

Haplothrips tibialis, on sugar-cane in Porto Rico, II. **308**, III. **134**.

Haplothrips tritici (see *Frankliniella*).

harrisana, *Eucosma*.

Hardbacks (see *Cyclocephala, Dyscinetus, Lachnosterna, Ligyrus*).

Hardback, not attacked by *Lymantria dispar* in U.S.A., III. **669**.

Harlequin Cabbage Bug (see *Murgantia histrionica*).

Harlequin Fruit Bug (see *Dindymus versicolor*).

Harmonia conglobata var. *gemella* (see *Coccinella*).

Harmonia maculata, destroying *Aspidiotus destructor* in Africa, III. **649**.

harnedi, *Apanteles*; *Elasmus*.

Harpactor costalis, life-history of, in India, III. **145**.

Harpagoneura complana, on coconut in the New Hebrides, II. **691**.

Harpagoneura complexa, on coconut in the South Sea Islands, II. **3**.

harpaloides, Anisodactylus.
Harpalus calceatus (see *Ophonus*).
Harpalus compar, predaceous on *Blissus leucoptera* in U.S.A., II. 227.
Harpalus faunus, predaceous on *Crambus caliginosellus* in U.S.A., II. 525.
Harpalus pennsylvanicus, predaceous on *Crambus caliginosellus* in U.S.A., II. 525.
Harpalus psittaceus, predaceous on *Bothynoderes punctiventris* in Russia, II. 179.
Harpalus pubescens (see *Ophonus*).
Harpalus ruficornis, on Conifers in Sweden, III. 65.
Harpalus tardus, on *Camelina sativa* in Russia, II. 467.
Harpella geoffroyella (see *Oecophora*).
Harpiphorus maculatus, on strawberries in Missouri, I. 475.
Harpyia vinula (see *Dicranura*).
Harrisina coracina, on vines in Arizona, I. 180.
Harrisina metallica, on vines in Arizona, I. 180.
Harrogania madagascarensis, Stictococcus gowdeyi on, in Uganda, III. 289.
hartigi, Ichneumon.
Hartigia cressoni (Raspberry Horntail), bionomics of, in California, II. 439, III. 419.
hartii, Aspidiotus.
Harvest Mite (see *Trombidium pusillum*).
Harvester Ant (see *Pogonomyrmex barbatus*).
Harvesting Termite (see *Hodotermes*).
hastifer, Agrilus.
hastulifer, Pteromalus.
Hawaii, miscellaneous pests in, I. 167, 272, 218, 374, II. 414, 690, III. 13, 363, 411, 680, 682, 726; Agromyzids from, I. 62; bionomics and control of *Ceratitis capitata* in, I. 38, 374, 510, II. 115, 316, 578, 598, III. 36, 332, 567; precautions against importation of *Ceratitis capitata* from, into U.S.A., I. 151; Chalcid parasites from, I. 549; biomics of *Dacus cucurbitae* in, III. 29, 36, 163; *Heilipus lauri* not present in, II. 189; *Metarrhizium anisopliae* imported from, into Ceylon, III. 754; utilisation of beneficial parasites in, I. 92, II. 20, III. 133, 169, 170, 247, 289, 364. 412, 413, 492, 548, 681, 712, 739, 757; pests intercepted in, I. 374, III. 413, 492, 657; pests from, intercepted in U.S.A., I. 269, II. 461, III. 420, 558, 690, 739; cotton pests in, I. 351, 353; pests of mangos in, I. 99, 374, II. 540; *Phthorimaea operculella* on potato and tobacco in, I. 102, II. 280, 629; rubber pests in, I. 351, II. 414; sugar-cane pests in, I. 103, 222, 374, III. 17, 757; tobacco pests in, I. 102, II. 629; *Aphycus terryi*, sp. n., bred from *Pseudococcus saccharifolii* in, II. 20; *Phryganodes blackburni* on coconut in, III. 316.
Hawaiian Beet Webworm (see *Hymenia fascialis*).
Hawaiian Sugar-cane Borer (see *Sphenophorus obscurus*).
hawaiiensis, Melittobia; Pimpla.
Hawk, destroying *Sitones hispidulus*, III. 380.
Hawthorn, fruit pests infesting, I. 368, 403, 404, II. 281, III. 57; *Eriocampoides limacina* on, in Australia, III. 527; pests of, in Britain, I. 433, II. 655, III. 676, 762; *Scolytus pruni* on, in Germany, II. 485; *Halyzia* (*Thea*) *22-punctata* on, in Sicily, II. 150; pests of, in Canada and U.S.A., I. 154, 231, 426, II. 188, 390, 599, 704, III. 140, 258, 260, 261, 358, 375, 423, 668; Aphids on, II. 70, 79; (see *Crataegus*).
Hawthorn Moth (see *Scythropia crataegella*).
Haws (see Hawthorn).
Hazel (Filbert) (*Corylus avellana*), pests of, in Britain, I. 388, 433, III. 80, 678; pests of, in France, I. 68, 472, III. 694; *Phyllobius calcaratus* on, in Holland, I. 385; pests of, in Russia, II. 11, 45, 198, 337, 419, III. 130, 535; pests of, in U.S.A., I. 225, II. 188, 251, 600, III. 258, 262, 668.
Heart and Dart Moth (see *Feltia exclamationis*).
Heath, *Eriococcus inermis* on, in Britain, III. 753.
Heather, *Lochmaea suturalis* on, in Scotland, I. 387.
hebesana, Olethreutes.
hebetor, Habrobracon (*Bracon*).
hecphora, Phrystola.
hector, Batocera; Pachydissus.
Hedera helix (see Ivy).
hederae, Aphis; Aspidiotus; Macrosiphum.
hederella, Aphis.
Hedge Ermine Moth (see *Hyponomeuta cognatellus*).
Hedgehogs, destroying insects, I. 464, II. 28, 474, III. 392.
Hedysarum coronarium (Maltese Clover), in Italy, II. 511.

Hedysarum onobrychis, *Acyrthosiphon pisi* on, III. 702.
Hedylus, parasite of *Ceratitis capitata* in West Africa, II. 317.
Heilipus lauri (Avocado Weevil), distribution of, II. 189; intercepted in avocado seeds from Costa Rica and Mexico, II. 461; precautions against, in U.S.A., II. 13.
heimi, *Coptotermes*; *Microceroterme*.
heinrichi, *Ectoedemia*.
Helianthus (see Sunflower).
Helianthus argophyllus, *Charidryas gorgone* on, in Colarado, III. 753.
Helianthus coloradensis, *Chloridea obsoleta* on, in Colorado, III. 753.
Helianthus lenticularis, insects found on, in Colorado, III. 753.
helichrysi, *Aphis*.
helicis, *Sarcophaga* (*Helicobia*).
Helicobia helicis (see *Sarcophaga*).
Heliodines roesella, on spinach, I. 69, III. 124.
heliopa, *Phthorimaea*.
Heliophila albilinea (see *Meliana*).
Heliophila subpunctata (see *Cirphis latiuscula*).
Heliophila unipuncta (see *Cirphis*).
heliophila, *Pimpla*.
Heliothis (see *Chloridea*).
Heliothis obtectus, in S. Africa, I. 146.
Heliothrips, bionomics of, on tea in Ceylon, III. 157.
Heliothrips fasciatus (Bean Thrips), on almonds in California, III. 690; parasitised by *Thripoctenus russelli* in England, II. 488; on orange in the Mediterranean region, III. 144.
Heliothrips femoralis, on sugar-cane in Porto Rico, II. 308, III. 134.
Heliothrips haemorrhoidalis, on Kentia palms in Austria, II. 482; on orange in Florida, III. 326; in greenhouses in Holland, III. 740; on cacao in Porto Rico, II. 130; on *Viburnum* in Russia, II. 267; feeding habits of, III. 571; on *Citharexylum quadrangulare* in the West Indies, I. 97.
Heliothrips (*Solenothrips*) *rubrocinctus* (Cacao Thrips), on cacao in Br. Guiana, II. 569; legislation against, in Br. Guiana, III. 175; bionomics of, in the West Indies, I. 97, 98, 198, 263, 270, II. 70, 87, 104, 130, 146, 324, III. 137, 276, 368, 582, 662.
Heliotrope, *Aleurodes vaporariorum* on, in England, III. 285.
helix, *Psyche* (see *Apterona crenulilla*).
Hellebore, III. 361; against *Chortophila brassicae*, I. 387, II. 161, 465; against cutworms, III. 732; against *Eriopus floridensis*, II. 92; against *Harpiphorus maculatus*, I. 476; against sawflies, I. 168, II. 512, 561, 576, 710, III. 78, 97, 181, 408, 551, 620; against thrips, II. 118, III. 470; preparation of extracts of, III. 505; small value of, as an insecticide, II. 561.
Helleborus foetidus, preparation of extract of, III. 505.
Helleborus niger, preparation of extract of, III. 505.
hellerella, *Laverna*.
Hellula undalis (Cabbage Webworm), on Crucifers in Australia, III. 6; controlled with lead arsenate in Georgia, III. 471; on radish in Guam, III. 373; on Crucifers in Hawaii, III. 363; on vegetables in Rhodesia, II. 235.
Helopeltis (Mosquito Blight), on cacao in Tropical Africa, II. 634, III. 528, 752; on tea, etc. in India and Java, I. 3, 59, 370, II. 157, 158, III. 312, 647, 663; measures against, II. 157, 671.
Helopeltis antonii, on tea in Ceylon, I. 88, II. 643, 671; on cacao in Java, III. 661; food-plants of, in the Philippines, III. 137.
Helopeltis bergrothi, on cacao and cotton in Africa, I. 415, II. 2, 581, 670, III. 661.
Helopeltis schoutedeni, on cacao in the Belgian Congo, III. 663.
Helopeltis theivora (Tea Mosquito), on cacao in Java, III. 661; on tea in India, I. 370, II. 158, 430, III. 489.
Helophorus rugosus, on turnips in Britain, I. 138, 387.
Helops, in vineyards in France, II. 679.
Helops cisteloides, on apple in U.S.A., III. 181.
Helops micans, on apple in U.S.A., III. 181.
Helorus sp. n., parasite of *Chrysopa* in Canada, III. 25.
Helorus anomalipes, parasite of *Chrysopa* in France, II. 91.
helvolus, *Dorylus*.
helymus, *Metachaeta*.
Hemarchus (*Phibalosoma*) *pythonius*, on coconut in the South Sea Islands, II. 691.
hemerobiella, *Coleophora*.
Hemerobius, preying on vine moths in France, II. 607; preying on *Aphis gossypii* in Nigeria, II. 107.

Hemerobius californicus, preying on spiders in U.S.A., I. **144.**
Hemerobius pacificus (Brown Lacewing), bionomics and distribution of, in America, III. **269, 570**; predaceous on *Tetranychus telarius* in U.S.A., III. **64.**
Hemerocampa (Tussock Moth), control of, in Canada and U.S.A., II. **560,** III. **122, 137, 673, 734**; natural enemies of, I. **417,** II. **136, 711.**
Hemerocampa definita, II. **184.**
Hemerocampa leucostigma (White-marked Tussock Moth), in orchards in Canada and U.S.A., I. **91, 281, 290,** II. **104, 386,** III. **584.**
Hemerocampa vetusta (California Tussock Moth), food-plants of, in California, I. **134,** II. **117, 287, 599.**
Hemerodromia superstitiosa, predaceous on *Typhlocyba comes* in U.S.A., II. **282.**
Hemerophila atrolineata, on mulberry in Japan, I. **520.**
Hemerophila (*Simaethis*) *nemorana*, bionomics of, on figs in France, I. **229,** II. **421,** III. **10,** on figs in Portugal, I**3. 14.**
Hemerophila (*Simaethis*) *pariana* (*Choreutis parialis*), on fruit in France, III. **11, 496**; on apples in Russia, I. **489, 539,** II. **331, 428,** III. **204, 214, 393, 606.**
Hemiberlesia (see *Aspidiotus*).
Hemichionaspis, parasitised by *Dentifibula ceylonica*, III. **725.**
Hemichionaspis alatae, sp. n., on *Cassia alata* in Ceylon, III. **168.**
Hemichionaspis aspidistrae, on cotton in Africa, II. **1**; on palms in Ceylon, III. **83**; on coconut in the New Hebrides, II. **691**; on ferns in Holland, III. **201**; parasitised by *Aspidiotiphagus schoeversi* in Holland, III. **736**; ants not associated with, in the Seychelles, II. **567**; intercepted in U.S.A., on ferns, etc. from Belgium and England, III. **117, 354, 469, 626, 690**; intercepted in U.S.A. on *Aspidistra lurida* etc. from Japan, III. **420, 558**; parasitised by *Dentifibula obtusilobae*, III. **725.**
Hemichionaspis minor, on cotton etc. in E. Africa, I. **246, 415,** II. **581,** III. **164**; on *Buchanania* in Australia, III. **167**; on leguminous plants in Ceylon, III. **83**; bionomics of, on cotton in Br. Guiana, II. **417**; parasite of, in British Guiana, II. **520**; intercepted in Hawaii on coconut from Fanning Island, III. **492**; bionomics of, on cotton in Peru, I. **157, 322,** III. **135**; on *Asparagus plumosus* in Florida, III. **327**; on Eucharis lily in Russia, III. **548**; ants not associated with, in the Seychelles, II. **567**; intercepted in U.S.A. on coconut etc., III. **558, 626, 739**; on cotton etc. in the West Indies, II. **87, 144,** III. **411, 476**; parasites of, II. **520,** III. **357.**
Hemichionaspis proxima, sp. n., on mango etc. in W. Africa, II. **354.**
Hemileia vastatrix, on coffee in E. Africa, I. **105, 108**; on crops in the Far East, II. **489**; on coffee in Uganda, II. **275.**
Hemileuca maia, destroyed by *Podisus modestus* in Canada, II. **665.**
Hemileuca oliviae, parasitised by *Anastatus semiflavus* in New Mexico, III. **151.**
hemipterus, Carpophilus; *Hemiteles*; *Metamasius* (*Sphenophorus*); *Synistovalgus.*
Hemirhipus, predaceous habits of, III. **299.**
Hemisarcoptes malus, attacking *Hemichionaspis minor* in Peru, I. **323.**
hemisphaerica, Saissetia (*Lecanium*).
Hemiteles, I. **57**; parasite of *Hymenia fascialis* in U.S.A., I. **292.**
Hemiteles aestivalis, parasite of *Chrysopa* in France, II. **91.**
Hemiteles areator, hyper-parasite of *Tinea biselliella* in Britain, II. **270**; parasite of vine moths in Russia, III. **211**; hyper-parasite of *Polychrosis botrana* in Tyrol, III. **497.**
Hemiteles carpocapsae, parasite of *Cydia pomonella* in Russia, III. **35.**
Hemiteles crassicornis, parasite of *Acidia heraclei*, in Britain, III. **627.**
Hemiteles hemipterus, parasite of *Polychrosis botrana* in Tyrol, III. **497.**
Hemiteles sordipes, parasite of *Polychrosis botrana* in Tyrol, III. **497.**
Hemiteles subzonatus, III. **627.**
Hemlock, pests of, in U.S.A., II. **183, 710,** III. **19, 87, 567, 668**; resistant to gipsy moth in U.S.A., II. **711.**
Hemlock, Japanese, *Aspidiotus tsugae* on, in New Jersey, II. **386.**

Hemp (*Cannabis*), *Pyrausta nubilalis* on, in Egypt, I. **501**; *Pyrausta nubilalis* on, in France, I. **409**; pests of, in Russia, II. **34, 648**, III. **205, 222, 481**; avoided by *Pieris brassicae*, I. **68, 191**; *Psylliodes attenuata* on, I. **342**.
Hemp Flea-Beetle (see *Psylliodes attenuata*).
Henbane (see *Hyoscyamus*).
Henicopus hirtus, on grain in Russia, III. **221**.
Henicopus pilosus, on grain in Russia, III. **221**.
Henicospilus, parasite of Lepidoptera in Hawaii, III. **682**.
Henicospilus antankarus, parasite of *Diatraea* spp. in Réunion and Mauritius, II. **215**, III. **383**.
Henicospilus guyanensis, parasite of *Laphygma frugiperda* in Br. Guiana, I. **521**.
Henicospilus merdarius, parasite of *Feltia exclamationis* and *Euxoa segetum* in Russia, II. **212**.
Henicospilus purgatus (see *Ophion*).
Henoticus serratus, on dried fruit in California, III. **575**.
Heortia vitessoides, on *Lagetta lintearia* in Ceylon, II. **644**.
heparana, Tortrix (*Pandemis*).
hepaticus, Ludius.
Hepialus humuli, on hickory in Germany, I. **372**; food-plants of, in Scotland, II. **498**.
Hepialus lupulinus, on strawberries etc., in England, II. **563**, III. **660, 747**; food-plants of, in Holland, III. **198**; on grasses in Norway, III. **107**.
Heptasmicra curvilineata, parasite of *Diatraea* spp. in Br. Guiana, I. **521**, II. **568**.
hera, Callimorpha.
heracleana, Depressaria.
heraclei, Acidia (*Trypeta*); *Trioxys*.
Heracleum asperum, Acidia heraclei on, in France, III. **188**.
Heracleum longifolium, Acidia heraclei on, in France, III. **188**.
Heracleum sphondylium, Depressaria heracleana on, in Canada, I. **43**; *Acidia heraclei* on, in France, III. **188**.
herculeana, Formica; *Thaumatopoea*.
herculeanus vagus, Camponotus.
hercyniae, Lophyrus.
Heringia dodecella (see *Exotelia*).
Heritiera littoralis (Red Mangrove), weevils imported on, into U.S.A., II. **460**; Scolytid on, in India, III. **728**.
heritierae, Diapus.
hermanniae, Coryna.
Hermetia chrysopila, on cactus in U.S.A., I. **82**.
Hermetia hunteri, on cactus in U.S.A., I. **82**.
hermistoni, Aphis.
Herpestomus (*Ichneumon*) *brunnicornis*, parasite of *Hyponomeuta malinellus* in Russia, I. **347**, III. **344**.
Herpestomus furunculus, parasite of *Polychrosis botrana* in Tyrol, III. **497**.
Herpetophygas fasciatus (see *Anthores leuconotus*).
herricki, Platygaster.
Herse cingulata (see *Protoparce*).
Herse convolvuli, bionomics of, on sweet potatoes in Natal, II. **573**; on sweet potatoes in Nigeria, III. **167**; a serious pest in Dutch E. Indies, III. **202, 644**.
Hesperia sylvanus (see *Augiades*).
hesperidum, Coccus (*Lecanium*).
Hesperis matronalis, visited by bees in Russia, II. **64**.
Hesperophanes cinereus, bionomics of, on fig in France, III. **10**.
Hesperophanes pallidus, parasitised by *Iphiaulax flavator* in France, III. **11**.
Hessian Fly (see *Mayetiola destructor*).
heterobia, Rhabdophaga.
*Heteroc*ordylus malinus* (Apple Red Bug), bionomics of, on apples in Canada and U.S.A., I. **154, 290**, III. **193, 358, 414, 473, 734**.
Heterodera (Eelworms), on vines in South Africa, III. **502**; on clover in Italy, III. **178**.
Heterodera radicicola, on potatoes in S. Australia, II. **584**; on chrysanthemums in Britain, III. **747**; intercepted in California on potatoes, III. **420, 494, 558**; legislation against, in California, III. **624**; on tea in Ceylon, III. **123**; on vines in England, II. **237**; on melons in Europe, I. **124, 526**; on oats in France, III. **428**; on tomatoes in Mauritius, II. **612**; on chrysanthemums in Russia, II. **424**; on maize in Russia, III. **541**; causing root-knot of tomatoes in U.S.A., III. **177, 267**; plants immune to, III. **178**.
Heterodera schachtii, on sugar-beet in Denmark, III. **246, 699**; on lucerne in Europe, I. **526**; on sugar-beet, etc., in Holland, III. **202, 740**; on maize in Russia, III. **541**; on Jerusalem artichoke, III. **33**.

Heterodera schachtii var. *avenae*, on oats in Denmark, III. **245, 246, 698.**
Heterodes, on cotton in Africa, II. **1.**
Heteromelea arbutifolia (Mountain Holly), scale-insects on, in California, II. **553, 663.**
Heteromicta latro, on bananas in Queensland, II. **511.**
Heteronychus arator, bionomics of, on maize in S. Africa, II. **299,** III. **503.**
Heteronygmia leucogyna, on mahogany in Nyasaland, II. **277, 340**; parasitised by *Pleurotropis violaceus* in Nyasaland, III. **444.**
Heteropelma calcator, hosts of, III. **49.**
Heterothrips aesculi, sp. n., on *Aesculus pavia* in Florida, III. **357.**
Heterothips sericatus, sp. n., on guava in Porto Rico, I. **343.**
Heterusia cingala (Tea Red Slug), on tea in Ceylon, I. **88,** II. **643,** III. **61.**
Heterusia magnifica, on tea in India, III. **488.**
Heuchera hartwegii, *Macrosiphum heucherae* on, in California, III. **687.**
heucherae, *Macrosiphum.*
Hevea brasiliensis (Para Rubber), pests of, in Tropical Africa, I. **351,** II. **414, 592,** III. **164, 648, 752**; pests of, in Brazil, II. **193**; pests of, in Br. Guiana, II. **55, 417, 497, 569**; pests of, in Ceylon, I. **88, 89,** II. **191,** III. **157**; pests of, in the Far East, II. **491**; *Aspidiotus destructor* on, in Fiji, I. **136**; pests of, in Java, I. **355,** III. **313, 314, 345, 646, 648, 713**; pests of, in Malaya, II. **133**; *Saissetia* (*Eulecanium*) *nigra* on, in Seychelles, I. **76, 129, 474**; *Oryctes rhinoceros* on, in Samoa, II. **26.**
heveae, *Stephanoderes.*
hexastigma, *Psylla.*
hexophthalma, *Serinetha.*
hibisci, *Cerococcus.*
Hibiscus, pests of, in Tropical Africa, I. **272,** II. **106, 277,** III. **288**; *Howardia biclavis* intercepted on, in California, III. **739**; *Gelechia gossypiella* on, in Egypt, I. **92**; not attacked by *Pseudococcus filamentosus* in Egypt, II. **146**; *Aulacaspis pentagona* on, in Fiji, III. **548**; *Laphygma exigua* on, in India, II. **248**; scale-insects on, in the Philippines, II. **243**; scale-insects on, in the Seychelles, I. **129,** II. **567**; scale-insects on, in West Indies, I. **198,** III. **411.**
Hibiscus abelmoscus, *Tetranychus bioculatus* on, in India, I. **508.**
Hibiscus arnottianus, *Eucosma marcidella* on, in Hawaii, III. **680.**
Hibiscus cannabinus, *Earias insulana* on, in E. Africa, II. **580.**
Hibiscus esculentus (Okra), pests of, in Tropical Africa, II. **108, 580**; *Saissetia nigra* on, in Br. Guiana, II. **417**; pests of, in Guam, III. **373**; *Solenopsis geminata* on, in the Philippines, I. **314**; used as trap-crop against *Stirastoma depressum* in Surinam, III. **661**; as a trap crop against *Earias insulana* in Uganda, II. **591**; *Anomis* (*Cosmophila*) *erosa* on, in Virginia, II. **140**; pests of, in Porto Rico, III. **476**; pests of, in Zanzibar, III. **125.**
Hibiscus ficulneus, *Tetranychus bioculatus* on, in India, I. **508.**
Hibiscus penduriformis, *Tetranychus bioculatus* on, in India, I. **508.**
Hibiscus syriacus, *Pulvinaria citricola*, sp. n., on, in Japan, III. **127**; cotton-boll weevils on, in U.S.A., II. **583,** III. **330.**
Hibiscus trionum, *Aphis gossypii* on, in Turkestan, II. **312.**
Hickory (*Carya*), pests of, in Canada and U.S.A., I. **54, 148, 225, 280, 299,** II. **94, 183, 294, 600, 697,** III. **87, 141, 191, 193, 558, 587, 668, 671**; *Hepialus humuli* on, in Germany, I. **372**; resistant to gipsy moth in U.S.A., II. **711.**
Hickory Aphis, Little (see *Monellia caryella*).
Hickory Bark Beetle (see *Scolytus quadrispinosus*).
Hidari irava (Coconut Skipper), on coconut in the Malay States, I. **217,** II. **134,** III. **12, 323.**
hiemalis, *Polygnotus.*
Hierodula westwoodi, preying on *Psylla isitis* in India, I. **45.**
hieroglyphicus, *Corymbites.*
Hieroglyphus banian, on rice, sugarcane etc. in Southern India, II. **67.**
hilaris, *Bagrada*; *Nezara*; *Popillia.*
Hilda breviceps, parasitised by *Pseudobrachysticha semiaurea*, sp. n., in the Philippines, III. **621**; on *Anona muricata* in the Philippines, III. **753.**
himalayensis, *Chermes.*
Himera pennaria, in woods in England, II. **378.**
Hippiscus phoenicopterus, on fruit in U.S.A., III. **181.**
Hippiscus rugosus, on fruit in U.S.A., III. **181.**

hippocastani, Melolontha; *Typhlocyba.*
Hippodamia ambigua, preying on Aphids in U.S.A., II. **527**, III. **760.**
Hippodamia convergens, II. **168, 494**; introduction of, into Italy, II. **86**; predaceous on Aphids and other insects in U.S.A., I. **55, 242, 353, 390, 418, 511, 548**, II. **227, 246, 663**, III. **115, 132, 150, 420, 471, 494, 512, 557, 576, 625, 690, 760**; parasitised by *Perilitus americanus* in U.S.A., II. **131**; inefficient against *Chromaphis juglandicola*, II. **582.**
Hippodamia glacialis, preying on *Blissus leucoptera* in U.S.A., II. **227**; parasitised by *Perilitus americanus* in Virginia, II. **131.**
Hippodamia parenthesis, bionomics of, in Oregon, I. **511**; preying on Aphids in U.S.A., II. **679**, III. **132.**
Hippodamia spuria, in Oregon, I. **511**; predaceous on Aphids in U.S.A., III. **132.**
Hippodamia tredecimpunctata, in Russia, I. **457**; predaceous on Aphids in Russia, III. **220**; predaceous on *Blissus leucoptera* and *Phylloscelis atra* in U.S.A., II. **227, 456.**
Hippophae, Rhopalosiphum hippophaes on, III. **351.**
hippophaes, Rhopalosiphum.
Hippotion (*Chaerocampa*) *celerio*, on cotton in Africa, I. **414**, II. **1, 580.**
hircina, Ononis.
hirta, Epicometis (*Tropinota*); *Epilachna*; *Lagria*; *Spalangia.*
hirtarius, Biston; *Bupalus.*
hirtella, Epicometis (see *E. hirta*).
hirtellus, Adoretus.
hirticornis, Diadiplosis.
hirtus, Athous.
Hispa aenescens, on rice in the Far East, II. **489.**
Hispa armigera, bionomics of, on rice in Southern India, II. **67.**
Hispa striaticollis, on maize in E. Africa, I. **414.**
hispanica, Ceratitis.
hispidulus, Sitones.
Hister fimetarius, predaceous on *Bothynoderes punctiventris* in Russia, II. **179**, III. **138.**
Hister sinuatus, predaceous on *Otiorrhynchus ligustici* in Russia, II. **669.**
histeroides, Tetroda.
histrio, Menida.
histrionica, Murgantia.
Hockeria, parasite of *Ephestia elutella* in Hawaii, III. **681.**
Hodotermes, food-plants of, in Africa, III. **756**; on crops in Rhodesia, I. **466.**
Hodotermes turkestanicus, damaging buildings in Turkestan, II. **73.**
hoefti, Colaphus (*Colaspidema*).
hofmanni, Depressaria.
Hog Plum (*Spondias mangifera*), *Batocera hector* on, in Java, II. **535.**
Holanusomyia pulchripennis, sp. n., parasite of *Pseudococcus citri* in the Philippines, III. **724.**
Holarrhena antidysenterica, Glyphodes laticostalis on, in India, III. **723.**
Holarrhena mitis, Caprinia conchylalis on, in Ceylon, II. **192.**
Holcopelte, parasite of *Tachardia albizziae* in India, I. **275.**
Holcaeus cecidomyiae, parasite of *Mayetiola destructor* in Europe, II. **65.**
Holcencyrtus calypso, hosts of, in Br. Guiana, II. **497, 520.**
Holland, miscellaneous pests in, I. **385**, II. **54, 89, 255, 641, 642**, III. **195, 198–202, 245–247, 644, 740–744**; insect pests on plants exported from, II. **186**, III. **117, 275, 354, 455, 469, 513, 625**; a new parasite of *Hemichionaspis aspidistrae* in, III. **736**; bionomics of *Incurvaria capitella* in, III. **643**; bionomics of *Tarsonemus spirifex* on oats in, III. **664**; rhododendron pests in, II. **641**; strawberry pests in, III. **194.**
Holly, *Chrysomphalus aurantii* on, in Australia, II. **584**; pests intercepted on, in California, III. **151, 558.**
Holly, American White, not attacked by *Lymantria dispar* in U.S.A., III. **669.**
Holly, Mountain (see *Heteromelea arbutifolia*).
Hollyhock, *Anomis* (*Cosmophila*) *erosa* on, in Virginia, II. **140.**
Holm Oak (see *Ilex*).
holmesi, Clania.
holmiana, Oxygrapha.
Holocremnus clandestinus, II. **369.**
Holoquiscalus brachipterus, destroying insect pests in Porto Rico, I. **182, 184**, II. **48.**
holosericea, Aeolesthes.
holosericeum, Prosternon; *Trombidium.*
Homalomma caliroae, sp. n., parasite of *Eriocampoides* in U.S.A., III. **658.**
Homalomma eriocampoides, sp. n., parasite of *Eriocampoides* in U.S.A., III. **658.**

Homalonotus coriaceus, on coconut in Brazil, III. 695.
Homalonotus deplanatus, on coconut in Brazil, III. 695.
Homalota, in colonies of *Leucotermes flavipes* in U.S.A., III. 379.
Homalotylus, parasite of Coccinellids in U.S.A., II. 154.
Homalotylus flaminius, parasite of Coccinellids in Russia, I. 458. II. 150; parasite of *Halyzia 22-punctata* in Italy, III. 431.
Homalotylus obscurus, parasite of sugar-cane Aphids in Porto Rico, III. 674.
Homalotylus obscurus var. *californicus*, parasite of *Chilomenes sexmaculatus* in U.S.A., III. 724.
Homalotylus vicinus, sp. n., parasite of *Nephus vetustus* in Eritrea, III. 432.
Homaspis nigripes, sp. n., in U.S.A., III. 691.
Homocerus, on cacao in the Gold Coast, III. 528.
homocerus, *Amblyteles*.
Homocidus dimidiatus, parasite of *Platycheirus albimanus* in Britain, I. 149.
Homocidus tarsatorius, parasite of *Platycheirus albimanus* in Britain, I. 149.
homoea, *Pleurotropis*.
Homoeosoma nebulella, on sunflowers in Russia, I. 460, II. 34, 718, III. 46, 171, 221, 481, 606.
Homona (*Capua*) *coffearia* (Tea Tortrix), on tea in Ceylon, I. 88, II. 643, III. 157.
Homoporus crassinervis, parasite of *Isosoma rossicum* in Russia, II. 473.
Homoporus fulviventris, parasite of *Isosoma* in Europe, II. 472.
Homoporus luniger, parasite of *Isosoma rossicum* and *Philachyra apterum* in Russia, II. 472.
Homoporus subapterus, parasite of *Mayetiola destructor* in Missouri, I. 528, II. 225.
Homoporus vassilievi, parasite of *Isosoma eremitum* var. *nodale* in Russia, II. 473.
Homotoma ficus, on fig in Italy, III. 124.
Homotripus signatus, parasite of *Brachycolus noxius* in Russia, III. 308.
Homovalgus squamiger, associated with termites in U.S.A., III. 379.
Honduras, British, froghoppers in, II. 62.
Honeysuckle (*Lonicera*), *Aleurodes citri* on, in Florida, III. 23; not attacked by *Lymantria dispar* in U.S.A., III. 669.
Honey-locust (*Gleditschia*), *Cacoecia* (*Archips*) *argyrospila* on, in U.S.A., I. 225.
hookeri, *Dinurothrips*.
Hoopoe, destroying insect pests in India, I. 345.
Hop Aphis (see *Phorodon humuli*).
Hop Dog (see *Dasychira pudibunda*).
Hop Flea-Beetle (see *Psylliodes attenuata*).
Hop Hornbeam, not resistant to gipsy moth, II. 711.
Hop Tree (see *Ptelea trifoliata*).
hopei, *Leptops*.
Hoplandrothrips affinis, sp. n., on sugar-cane in Br. Guiana, III. 650.
Hoplia parvula, on basket willow in Russia, III. 222.
Hoplia pubescens, food-plants of, in California, II. 708, III. 625.
Hoplia pubicollis (see *H. pubescens*).
Hoplocampa brevis, in orchards in Russia, I. 357, II. 42, 330, III. 92, 225, 339.
Hoplocampa canadensis (Violet Sawfly), on pansies in Canada, III. 551.
Hoplocampa cookei (Cherry Fruit Sawfly), on cherries in U.S.A., I. 178, II. 244.
Hoplocampa fulvicornis (Plum Fruit Sawfly), on plum in England, II. 563; on plums and grapes in France, II. 197, 421; in orchards in Russia, II. 36, 42, 496, 715, III. 225, 339, 393, 397, 401, 606.
Hoplocampa testudinea, in orchards in Germany, I. 386; on apples in Ireland, II. 9; in orchards in Russia, II. 42, III. 47, 204, 225, 402, 606.
Hoplocerambyx spinicornis (Sal Longicorn), bionomics of, on *Shorea robusta* in India, I. 381, III. 154, 722.
Hopperdozer, construction, of, III. 298; against *Colaspidema atrum*, II. 577; against locusts and grasshoppers, I. 453, II. 170, 246, 509, 519, 536, 541, III. 39, 297.
Hops (*Humulus lupulus*), *Aulacaspis pentagona* on, I. 222; distribution of *Psylliodes attenuata* on, I. 342; pests of, in Bohemia, I. 245, 410, II. 481; pests of, in Britain, I. 434, II. 498, 564, III. 9, 660; *Pyrausta nubilalis* on, in Egypt, I. 501; pests of, in France, I. 409, II. 420; pests of, in Russia, I. 530, II. 80, 465, III. 222, 606; pests of, in U.S.A., I. 225, 240, III. 64, 132, 352, 372, 423.
hordei, *Aphelinus*; *Isosoma*.

Hordeum (see Barley).
Hordeum jubatum, *Prosopothrips cognatus* on, in U.S.A., III. **577.**
Hordeum murinum, *Aphis hordei*, sp. n., on, in Italy, III. **54**; *Brachycolus noxius* on, in Russia, III. **307**; *Stictocephala festina* on, in U.S.A., III. **333.**
Horiola arcuata, on cacao in Br. Guiana, II. **569,** III. **663.**
Horismenus urichi, parasite of *Cirphis* in Mexico, I. **184.**
Horistonotus uhleri (Corn and Cotton Wireworm), bionomics of, in U.S.A., III. **299, 465, 693, 709.**
Hormomyia bulla, sp. n., on *Helianthus* in Canada, III. **62.**
Horn Fly (*Lyperosia*), parasites of, liberated in Hawaii, III. **170, 289, 493.**
Hornbeam (*Carpinus*), *Xyleborus dispar* on, in France, II. **402**; pests of, in Russia, III. **227, 438**; pests of, in U.S.A., I. **141,** III. **668**; not resistant to gipsy moth in U.S.A., II. **711.**
Hornets, on vines in New Jersey, III. **194**; on vines in Russia, III. **26.**
horni, *Scymnus.*
Horonotus optatus, in Queensland, III. **491.**
Horonotus quadrituber, on coconut in the South Sea Islands, II. **2.**
Horse Chestnut (*Aesculus hippocastanum*), *Eulecanium capreae* on, in Ireland, II. **656**; *Melolontha* spp. on, in Russia, II. **640**; pests of, in U.S.A., I. **141, 225**; *Lepidosaphes ulmi* intercepted on, in U.S.A., III. **558**; *Aulacaspis pentagona* on, I. **222.**
Horse-flies, destroyed by birds, II. **576.**
Horse Nettle (see *Solanum carolinense*).
Horse-radish (*Cochlearia armoracia*), *Phyllotreta armoraciae* on, in Canada, I. **299**; *Otiorrhynchus singularis* on, in Holland, I. **385**; pests of, in Russia, III. **45, 148**; pests of, in Sweden, III. **346**; pests of, in U.S.A., I. **177,** III. **709.**
Horse-radish Flea-Beetle (see *Phyllotreta armoraciae*).
Horse-radish Webworm (see *Plutella armoracia*).
horsfieldi, *Dasychira.*
hortensis, *Carabus*; *Chaetocnema*; *Pteronus.*
horticola, *Phyllopertha.*
hortorum, *Bombus.*
hortuellus, *Crambus.*
hortulanus, *Bibio.*
horvathi, *Psylla.*
Hotea acuta, on cotton in Africa, II. **2.**
Hotea subfasciata, on cotton in Africa, II. **2, 581.**
hottentota, *Ablabera.*
hottentotus, *Anthrax*; *Eurygaster.*
houghtonensis, *Aphis.*
Hound's-tongue (*Cynoglossum pictum*), *Phthorimaea operculella* on, II. **401.**
House-flies, parasites of, liberated in Hawaii, III. **170, 289**; distributing pear blight, III. **149**; infested with *Muscidifurax vorax* III. **503.**
howardi, *Aleurodes*: *Hadronotus.*
Howardia biclavis, intercepted on coffee etc. in California, III. **626, 739**; on tea etc. in Ceylon, III. **157, 168, 558**; on *Castilloa elastica* in St. Lucia, I. **76**; parasitised by *Dyodiplosis generosi*, sp. n., III. **725.**
Howardia biclavis detecta, on *Sapium janmani* in Br. Guiana, II. **417.**
Howardia silvestrii, sp. n., in French Guiana, II. **353.**
Hubbard-Riley emulsion, formula for, against Coccids, II. **445.**
hubbardi, *Gerstaeckeria.*
hübneri, *Hyalarcta.*
Huckleberry (*Gaylussacia*), not attacked by *Lymantria dispar* in U.S.A., III. **669**; *Rhagoletis pomonella* on, in U.S.A., III. **57, 89.**
hudsonias, *Systena.*
Huisache Girdler (see *Oncideres putator*).
humeralis, *Adalia bipunctata*; *Dacus* (*Tridacus*); *Ischnotrachelus*; *Sitones.*
humidicola, *Cirphis.*
humilis, *Iridomyrmex*; *Opius.*
humuli, *Hepialus*; *Phorodon.*
Humulus lupulus (see Hops).
Hungary, miscellaneous pests in, I. **486, 531,** II. **90, 125, 419, 467**; Aphids from, I. **77, 172,** II. **124, 236**; *Ceromasia interrupta* parasite of *Pyrausta nubilalis* in, I. **410**; pests of cereals in, I. **39,** II. **309, 526,** III. **94, 541**; pests of vines and their control in, I. **428,** II. **309, 411, 465**; bird protection in, II. **131, 155.**
hunteri, *Catolaccus*; *Eucoila*; *Hermetia*; *Sarcophaga.*
Hyacinth, *Blaniulus guttulatus* on, II. **557**; *Eumerus strigatus* and *Merodon equestris* on, II. **89,**

246, III. 200; *Hypopus spinitarsus* on, in Egypt, II. 505; *Tylenchus* spp. on, II. 625, III. 202, 740; pests of, in France, II. 594.
Hyacinth, Water (see *Eichhornia crassipes*).
Hyacinth, Wild (*Scilla nutans*), *Merodon equestris* on, in England, II. 88.
Hyacinth Mite (see *Rhizoglyphus hyacinthi*).
hyacinthi, Rhizoglyphus; *Tylenchus*.
Hyadaphis avenae (see *Aphis*).
Hyadaphis xylostei, on *Conium maculatum* in California, II. 251.
Hyalarcta hübneri, food-plants of, in Victoria, II. 493.
Hyalarcta nigrescens (Ribbed Case-moth), on eucalyptus in Victoria, II. 493.
hyale, Colias.
hyalinata, Diaphania.
hyalinatus, Syrphus.
hyalinipennis, Oxycarenus.
hyalinus, Perilampus.
Hyaloides vitripennis, preying on *Typhlocyba comes* in U.S.A., II. 282.
Hyalomyia, parasite of Lepidoptera, II. 528.
Hyalopterus arundinis (Prune Aphis) on fruit trees in Belgium, II. 177; bionomics of, in Canada and U.S.A., II. 599, 676, III. 16, 72, 192, 351, 423; on peach in N. Italy, III. 124; bionomics of, in Russia, II. 35, 79, 80, 81, 715, III. 45, 220, 226, 393, 399, 601, 606.
Hyalopterus dilineatus, on roses, III. 748.
Hyalopterus pruni (see *H. arundinis*).
Hyalopterus trirhodus, on roses, III. 748.
Hyalorhipis clausi, in Russia, III. 636.
Hybernia aurantiaria, in woods in England, II. 378.
Hybernia defoliaria, in woods in Britain, I. 463, II. 378, 619, 620; in orchards in Holland, II. 642; in woods in Russia, II. 428, III. 437; banding experiments against, III. 80.
Hybernia marginaria, on Conifers in Britain, I. 119.
Hydrangea, Aphids intercepted on, in Hawaii, III. 657; Aphids imported into U.S.A. on, from Holland, III. 513.
Hydrellia griseola, on grain crops in Holland, I. 386; on barley in Russia, II. 172.
Hydrocyanic Acid, against ants, II. 593, III. 647; against Aphids, I. 205, 266, 521, II. 390, 391, III. 516, 599; against *Carpophilus hemipterus*, III. 685; against *Gelechia gossypiella*, II. 219; cost of using, against *Lasioderma serricorne*, I. 171; against scale-insects, I. 232, 265, 312, 313, II. 101, 103, 149, 165, 184, 296, 437, 625, 654, III. 73, 102, 125, 621, 689; against termites, I. 477, III. 379; against thrips, I. 217; against *Trioza alacris*, II. 482; against whitefly, III. 23; ineffective against Aphids in Italy, III. 665, 666; ineffective against Argentine ant, I. 328; against clothes-moths, III. 335; ineffective against leaf-miners, III. 350, 454; ineffective against *Limonius californicus*, II. 304; ineffective against *Tribolium confusum*, II. 549; effect of, on insect-eggs, III. 423; against pests of stored grain and flour, I. 118, 152, II. 40, III. 175, 409, 465; unsatisfactory for fumigating cotton seed, II. 531; effects of, on plants, II. 245, 363, 611, III. 73, 273, 381, 754; disinfection of plants with, I. 312, II. 450; apparatus for fumigation with, II. 103, III. 347, 458; formula for making, III. 689; efficiency of, increased by pressure, III. 377; influence of temperature, etc., on effect of, I. 454.
Hydroecia micacea, on rye and beet in Denmark, III. 246, 698; food-plants of, in Holland, III. 198; on potatoes in Ireland, III. 460; food-plants of, in Nova Scotia, III. 69, 678; on potatoes and strawberries in Sweden, III. 435, 695.
Hydroecia nictitans (see *Apamea*).
Hydroecia xanthenes, on artichokes in France, II. 450.
Hydrometer, use of, to test strength of lime-sulphur, III. 367, 417.
Hydrophilus, immune to *Coccobacillus* in France, I. 167, 336.
Hydrosulphate of Soda, against ants, I. 224.
Hyelodesia trimaculata (see *Phaonia*).
Hygrochroa syringaria, in Russia III. 400.
Hyla arborea, killed by *Coccobacillus cajae*, I. 167.
hylaeiformis, Pennisetia (*Bembecia*).
hylas, Cephonodes.
Hylastes ater, on Conifers in Russia, I. 539, III. 66, 217.
Hylastes minor (see *Myelophilus*).

Hylastes palliatus, on pines in Scotland, II. 498, III. 715; in Bohemian forests, II. 720.
Hylastes trifolii, on clover in Italy, III. 524.
Hylastinus obscurus (Clover Root Borer), on clover and lucerne in Canada, I. 400, 406, II. 25, 664; on lucerne in Europe, I. 526; on clover in France, II. 420; on clover in Germany, II. 500.
Hylemyia antiqua (Onion Fly, Onion Maggot), bionomics and control of, in Canada and U.S.A., I. 405, II. 161, 381, 492, 537, 676, 677, 680, III. 68, 69, 71, 163, 335, 422, 455, 531, 551, 569; in France, II. 420, 542, III. 1, 189; intercepted on turnips in Hawaii, III. 657; on shalot and leeks in Holland, I. 386; on lettuce in Italy, III. 124; in Russia, I. 498, II. 198, 373, 374, 442, III. 104, 148, 393, 401, 544, 606; in Scotland, III. 715; synonyms of, III. 1.
Hylemyia coarctata (Wheat Fly), in Austria, II. 482, 590; bionomics of, in Denmark, II. 475, III. 245, 698; on grasses in England, I. 434; in Holland, I. 386; in Russia, I. 214, 484, II. 35, 172, 198, 352, 370, III. 640; in Tunis, II. 231; compared with *Hylemyia* (*Adia*) *genitalis*, II. 350.
Hylemyia nigrescens (Carnation Fly), in Holland, III. 742.
hylesini, Ecphylus.
Hylesinus, parasitised by *Bracon scutellaris* in France, II. 426; on olive in Italy, I. 391.
Hylesinus cunicularis, in Germany, II. 326.
Hylesinus fraxini, on forest trees in Britain, I. 464; on cherry in Italy, III. 124; on olives in Palestine, II. 623; on ash in Russia, I. 461, III. 540.
Hylesinus oleiperda, on olive in Algiers, III. 99; on olive in Italy, I. 391, III. 171.
Hylesinus opaculus (see *Hylurgops*).
Hylesinus piniperda (see *Myelophilus*).
Hylietus, on cotton seed and tomatoes in Turkestan, II. 73.
hylobii, Bracon.
Hylobius abietis (Pine Weevil), in Bohemian forests, II. 720; in forests in Britain, I. 464, II. 661; bionomics of, in Germany, II. 325–328, 375, 501; control of, in forests in Russia, II. 332, 482, 483, III. 50, 66, 222, 337, 394, 398, 728; parasites of, II. 375, 661; destroyed by *Coracias garrula*, II. 147.
Hylobius pinastri, in Germany, II. 326.
Hyloicus drupiferarum, on fruit-trees in Br. Columbia, II. 675.
Hylophila bicolorana, on *Quercus pedunculata* var. *tardiflora* in Russia, III. 438.
Hylophila (*Halias*) *prasinana*, parasitised by *Heteropelma calcator* in Russia, III. 49; on oak in Russia, III. 403.
Hylophila quercana (see *H. bicolorana*).
Hylotoma berberidis (see *Arge*).
Hylotoma pagana, bionomics of, in Russia, II. 719, III. 47.
Hylotoma rosae, bionomics of, in France, I. 334, 335, II. 91; in Holland, I. 386, II. 641, III. 743; on roses in Russia, II. 719, III. 75, 610.
Hylotoma rosarum, in orchards etc. in Russia, I. 499, II. 44, III. 47, 401, 443.
hylotoma, Pteromalus.
hylotomarum, Eulophus.
Hylotrupes amethystinus, in *Thuja* and *Libocedrus* in U.S.A., III. 546.
Hylotrupes bajulus, in timber in Norway, III. 697; in Russia, III. 393; boring in metal, I. 43.
Hylotrupes juniperi, sp. n., in juniper in U.S.A., III. 546.
Hylurgops, in Conifers in Canada, I. 407.
Hylurgops (*Hylesinus*) *opaculus* (Elm Bark Borer), in Maine, I. 143.
Hylurgus piniperda (see *Myelophilus*).
Hymenachene amplexicaule, Diatraea saccharalis on, in Porto Rico, III. 674.
Hymenanthera dentata, Pulvinaria maskelli var. *novemarticulata* on, in Australia, III. 548.
Hymenia fascialis (see *Zinckenia*).
Hymenia perspectalis, on beet in U.S.A., I. 291.
Hymenia recurvalis, parasites of, in Hawaii, III. 682.
hymeniae, Oremastus.
Hymenobosmina pomonella, parasite of *Cydia pomonella* in Russia, I. 363.
hymenocleae, Pseudococcus.
Hyophorbe amaricaulus Oryctes rhinoceros on, in the Straits Settlements, II. 99.
hyoscyami, Pegomyia; Therapha.

Hyoscyamus, Mosaic disease of tobacco in, I. 19; *Pegomyia hyoscyami* on, in Britain, II. 617; *Therapha hyoscyami* on, in Russia, III. 7.
Hyoscyamus albus (White Henbane), *Phthorimaea operculella* on, II. 401.
Hyoscyamus niger, *Pegomyia hyoscyami* on, in Russia, II. 467; removal of, against *Pegomyia hyoscyami*, III. 608.
Hypamblys albopictus, parasite of *Lygaeonematus erichsoni* in Britain, III. 79.
Hypera adspersa, on lucerne in Europe, I. 527.
Hypera arator, food-plants of, in Holland, III. 743.
Hypera denominanda, bionomics of, in Russia, II. 262.
Hypera medicaginis, on lucerne in Bengal, I. 119.
Hypera meles, on lucerne in Europe, I. 527.
Hypera murina, on lucerne in Europe, I. 527; bionomics of, in Russia, II. 108-110.
Hypera nigrirostris, in Denmark, III. 699; on lucerne in France, II. 577.
Hypera postica (see *H. variabilis*).
Hypera punctata (Clover Leaf Weevil), on lucerne in France, II. 577; bionomics of, on clover and lucerne in U.S.A., II. 599, 600; natural enemies of, II. 17, 376, 585.
Hypera variabilis (Lucerne Weevil), in Bengal, I. 119; bionomics of, on lucerne in France, II. 17, 376, 577; on lucerne in Russia, I. 527, II. 39, 636, 716; bionomics and control of, in U.S.A., II. 294, III. 130, 139, 379, 516, 557; legislation against, in U.S.A., I. 85, II. 294, III. 335; natural enemies of, II. 17, 39, 376, 577, 585, III. 301; not present in California or Montana, II. 246, 537.
Hyperaspis, predaceous on *Sipha flava* in Porto Rico, III. 674; not parasitised by *Perilitus americanus* in Virginia, II. 132.
Hyperaspis cruenta, predaceous on *Dactylopius confusus* in U.S.A., I. 81.
Hyperaspis lateralis, predaceous on mealy bugs in California, II. 436.
Hyperaspis mercki var. *compacta*, n., from Eritrea, III. 431.
Hyperaspis pumila, predaceous on *Aphis gossypii* in Nigeria, III. 164.
Hyperaspis signata var. *binotata*, predaceous on Aphids and Coccids in U.S.A., III. 473.
Hyperaspis trifurcata, predaceous on *Dactylopius confusus* in U.S.A., I. 81.
Hyperaspis trilineata, predaceous on scale-insects in Br. Guiana, II. 31, 520.
Hyperoides fragariae, sp. n., on strawberry in S. Africa, III. 167.
Hyphaene guineensis (Doum Palm), pests of, in Africa, I. 351.
Hyphantria cunea (Fall Webworm), bionomics of, in orchards in Canada and U.S.A., I. 91, 176, 281, 284, 402, 417, II. 188, 485, 665, 675, III. 42, 180, 515.
Hyphantria textor, bionomics of, in Canada, I. 87, 90, 401, III. 584.
Hyphomycetes, infesting insects, II. 269.
Hyphoraia testudinaria, on chicory in France, I. 256.
Hypnoidus (see *Cryptohypnus*).
hypobori, *Laemophloeus*.
Hypoborus ficus, bionomics of, on fig in France, III. 10.
Hypocala moorei, on *Diospyros montana* in Ceylon, III. 157.
Hypochrysa, in South America, I. 229.
Hypocrella, infesting scale-insects in the Seychelles, I. 129, 474.
Hypocrella oxyspora, infesting scale-insects in the Seychelles, I. 76.
hypocrita, *Sipalus*.
hypogaea, *Misospatha* (*Rhopalomyia*).
Hypolimnas misippus, on cotton in Nyasaland, I. 272, II. 277.
Hypomeces squamosus, on tobacco in the Far East, II. 490.
Hyponomeuta, I. 466; on apple and cherry in New York, I. 64, 154; on fruit in Switzerland, II. 605; use of barium chloride against, III. 94.
Hyponomeuta cognatellus (Hedge Ermine Moth), in the Crimea, I. 346; bionomics of, in France, II. 637; bionomics of, in Sweden, III. 250; parasitised by *Ageniaspis fuscicollis* in Sweden, III, 147.
Hyponomeuta euonymellus, in forests in Norway, III. 697; on *Euonymus europaeus* in Russia, III. 545; bionomics of, in Sweden, III. 250.
Hyponomeuta malinellus (Apple Ermine Moth), I. 64; on apple in France, I. 227, II. 420, 637, III. 496; on apple in Germany, II. 499; on apple in

Ireland, II. 8; bionomics of, in Rumania, II. 564, III. 344; in orchards in Russia, I. 206, 209, 345, 357, 460, 488, 491, 492, 493, 496, 522, 536, II. 35, 42, 44, 264, 331, 341, 366, 369, 428, 441, 463, 522, 614, 647, 712, 718, III. 20, 27, 34, 41, 46, 50, 51, 52, 92, 104, 109, 119, 129, 172, 203, 220, 224, 311, 338, 339, 391, 393, 399, 402, 442, 481, 484, 601, 607, 610, 700; bionomics of, in Sweden, III. 250; in U.S.A., I. 154; natural enemies of, I. 347, 491, II. 331, 595, III. 147, 311, 345, 393, 399, 402, 481; measures against, I. 345, 347, 493, II. 35, 54, 211, 366, 499, 637, 647, III. 21, 27, 34, 42, 104, 105, 109, 119, 129, 391, 484, 601, 607, 700.

Hyponomeuta malviellus, parasitised by *Encyrtus fuscicollis*, I. 16.

Hyponomeuta multipunctellus, on *Euonymus atropurpureus* in Kentucky, I. 64.

Hyponomeuta padellus, on fruit trees in France, III. 496; on plums in Germany, II. 500; in forests in Norway, III. 697; bionomics of, in Sweden, III. 250; on plum and cherry in U.S.A., I. 64, 154.

Hyponomeuta padi, on *Prunus padus*, etc., in Russia, III. 172, 398.

Hyponomeuta rorellus, on *Salix* in Astrachan, III. 399.

Hyponomeuta variabilis, in Norway, III. 108; in orchards in Russia, I. 346, 522, II. 35, 42, 463, 700, 712, 714, III. 41, 46, 203, 220, 224, 338, 393, 399, 402, 601.

Hypophloeus linearis, on *Pinus sylvestris* in Britain, III. 675.

Hypopus spinitarsus, on hyacinth and onions in Egypt, II. 505.

Hyposidra infixaria, on coffee in the Far East, II. 490.

Hyposidra talaca, on coffee in the Far East, II. 490.

Hyposoter interjectus, sp. n., parasite of *Prodenia ornithogalli* in U.S.A., III. 151.

Hypostena (see *Tachinophyto*).

Hyposulphite of Soda (see Sodium Hyposulphite).

Hypothenemus eruditus, on cotton in Africa, I. 349, 351, II. 1; on sugar-cane in the West Indies, I. 351.

Hypothenemus tuberculosus, on rubber in the Belgian Congo, I. 351, II. 414, III. 649.

Hypsa caricae (*alciphron*), on tea in the Far East, II. 490.

Hypsoides, *Metoecis carnifex* in nests of, in Africa, II. 530.

Hypsoides milleti, producing silk in Uganda, I. 33.

Hypsopygia costalis, in stored grain and hay in Pennsylvania, I. 275.

hystrix, *Atta*; *Phricodus*.

I.

ianthes, *Dichomeris*.

icarus, *Lycaena*.

Iceland Moss (*Citaria islandica*), decoction of, against Lepidopterous eggs, III. 394.

Icerya, on croton in Ceylon, II. 644; on pigeon-peas in Nigeria, III. 166.

Icerya aegyptiaca, food-plants of, in E. Africa, II. 429.

Icerya jacobsoni, on *Dombeya acutangulata* in Java, I. 150.

Icerya maxima, on *Ficus* in the Gold Coast, II. 276.

Icerya palmeri, in Chile, I. 138.

Icerya purchasi (Australian Bug, Cottony Cushion Scale, Fluted Scale), I. 427; distribution of, I. 171, 392; on citrus in Africa, I. 258, 321, II. 299, 571, 596, 605; on citrus in Asia Minor, II. 189; on citrus in Australia, II. 584; declared a pest in Br. Columbia, I. 48; on citrus in France, I. 229, II. 397, 421, 450; introduction of enemies of, into Hawaii, III. 492, 757; on citrus in the Mediterranean Region, I. 172, 229, 320, 354, 392, II. 86, 189, 193, 450, III. 112, 143; bionomics and control of, on citrus, etc., in U.S.A., I. 264, II. 307, 439, 542, 599, III. 73, 275, 326, 382, 622; control of, by *Novius cardinalis*, I. 172, 229, 320, 321, 354, 392, 402, II. 86, 128, 189, 193, 397, 439, 450, III. 143, 492; *Novius cardinalis* not suitable for controlling, on pears, III. 348.

Icerya seychellarum, in Mauritius, III. 731; failure in introducing *Novius cardinalis* against, in Mauritius, II. 612; ants associated with, in the Seychelles, II. 567; on *Flacourtia inermis* in the Seychelles, I. 76.

Icerya splendida, sp. n., in E. Africa, II. 429.

Icerya sulfurea, sp. n., in E. Africa, II. 429.

Icerya zeteki, sp. n., from Panama, II. 253.

iceryae, *Cryptochaetum*; *Isodromus*.

iceryi, Pulvinaria.
Ichneumon, parasite of *Catochrysops cnejus* in India, II. 487.
Ichneumon albicinctus, parasite of *Bupalus piniarius* in Russia, III. 49.
Ichneumon albiger, in burrows of Longicorn beetles in Britain, I. 157.
Ichneumon bilineatus, parasite of *Abraxas grossulariata* in France, II. 622.
Ichneumon brunnicornis (see *Herpestomus*).
Ichneumon canadensis, parasite of *Cirphis unipuncta* in Canada, III. 369, 552.
Ichneumon comitator, parasite of *Abraxas grossulariata* in France, II. 622.
Ichneumon confusorius, in burrows of Longicorn beetles in Britain, I. 157.
Ichneumon dissimilis, parasite of *Bupalus piniarius* in Russia, III. 49.
Ichneumon extrematis, parasite of *Eriopus floridensis* in U.S.A., II. 92.
Ichneumon hartigi, parasite of *Dasychira pudibunda* in Holland, III. 196.
Ichneumon jucundus, parasite of *Cirphis unipuncta* in Canada, III. 552.
Ichneumon koebelei (see *Polysphincta*).
Ichneumon laetus, parasite of *Cirphis unipuncta* in Canada, III. 369.
Ichneumon leucaniae, parasite of *Cirphis unipuncta* in Canada, III. 369.
Ichneumon multicinctus, parasite of *Dasychira pudibunda* in Holland, III. 196.
Ichneumon nigritarsus, parasite of *Bupalus piniarius* in Russia, III. 49.
Ichneumon ochropis, parasite of *Abraxas grossulariata* in France, II. 622.
Ichneumon pigeoti, sp. n., in France, III. 97.
Ichneumon productus, sp. n., in France, III. 97.
Ichneumon ruficeps, parasite of *Bupalus piniarius* in Russia, III. 49.
Ichneumon sanguinatorius, parasite of *Xanthoecia flavago* (*Gortyna ochracea*) in France, I. 411.
Ichneumon sarcitorius, parasite of *Euxoa segetum* in Russia, I. 540, III. 46, 536.
Ichneumon scutellator, parasite of *Abraxas grossulariata* in France, II. 622.
Ichneumon trilineatus, parasite of *Abraxas grossulariata* in France, II. 622.
ichneumon, Titanochaeta.
Ichneutes reunitor, parasite of *Cladius padi* in France, II. 285.
ictericus, Meteorus.
Icterus bullocki, destroying *Diabrotica duodecimpunctata* in Russia, I. 431.
Icterus galbula, destroying insects in U.S.A., II. 709.
Icterus spurius, destroying *Cacoecia argyrospila* in U.S.A., I. 226.
Idacantha magna, on maize in E. Africa, I. 414.
idaei, Aphis.
Idaho, insect pests in, I. 324, 413, II. 599, III. 139, 466.
Idechthis, parasite of *Euzophera semifuneralis* in U.S.A., III. 655.
Idechthis nigricoxalis, sp. n., parasite of *Euzophera semifuneralis* in U.S.A., III. 418.
Idesia polycarpa, Pulvinaria idesiae, sp. n., on, in Japan, III. 127.
idesiae, Pulvinaria.
Idia lunata (see *Stomatorrhina*).
Idiocerus, on mango in India, II. 427; on willows in U.S.A., III. 530.
Idiocerus provancheri, bionomics of, in U.S.A., III. 687.
Idiopterus nephrolepidis, food-plants of, in Britain, III. 762.
idiota, Pentodon.
ignea, Caloplusia.
ignita, Haltica.
ignorata, Perrisia.
Ilex (Holm Oak), not attacked by *Aspidiotus perniciosus* in France, I. 472; *Sinoxylon sexdentatum* on, in France, III. 10; *Chrysomphalus aurantii* on, in S. Africa, II. 584; pests of, in Portugal, I. 313.
illata, Ampelosucta.
Illinois, insect pests in, I. 77, 124, 429, 528, II. 121, 307, 600, III. 87, 141, 456, 569; pests of stored grain in, I. 115.
illioneus, Caligo.
Illipe Tree, *Philematium femorale* on, in Mauritius, II. 730.
illuminatella, Argyresthia.
illustris, Pleurotropis.
imbricornis, Prionus.
immaculatus, Coccophagus; *Dacus.*
immaturus, Xyleborus.
Immortel (see *Erythrina*).
immunis, Astycus.
impar, Mylabris (*Zonabris*).
imparis, Prenolepis.
Imperata arundinacea, Cacochroa decorticata on, in Queensland, III. 491.

impletella, Euzophera (see *E. semifuneralis*).
impluviatus, Monochamus.
importunitas, Ragmus.
impressa, Pachnoda.
impressifrons, Polydrosus.
impressus, Meloë.
inaequalis, Agromyza.
Incense Cedar (see *Libocedrus decurrens*).
incepta, Melampsalta.
incertum, Phaedon.
incertus, Catolaccus.
inclusum, Chiracanthium.
incompletus, Ephedrus.
incongrua, Chrysopa.
incubitor, Eulophus.
Incurvaria capitella (Currant Shoot Moth), on currants in England, II. 563; bionomics of, in Holland, III. 643; on red currants in Russia, II. 480, III. 108, 224.
Incurvaria rubiella (Raspberry Moth), on raspberries in Germany, III. 582; bionomics of, in Holland, III. 643, 741; bionomics of, on raspberries in Russia, I. 206, 207, II. 369, 480.
indagans, Habrocytus.
indagator, Epiurus.
indeterminabilis, Megacanthopus.
India, miscellaneous pests of, I. 169, 345, 482, 508, 526, II. 60, 138-140, 209, 242, 248, 487, 558, III. 27, 62, 144-146, 345, 360, 461, 661, 714; Coccidae of, I. 158, II. 339, 578, 583, III. 345; bionomics and control of cutworms in, I. 482, 507, 509, II. 139, III. 320, 360; fruit-flies in, I. 328, III. 27, 748; *Gelechia gossypiella* imported into U.S.A. on cotton from, III. 454; locusts and grasshoppers in, I. 344, II. 38, III. 755; bionomics of *Nephotettix bipunctatus* in, III. 528; *Oryctes rhinoceros* in, II. 99, 690; *Psylla isitis* on indigo in, I. 43-46, II. 687; *Trycolyga bombycis* destroying silkworms in, II. 670; new weevils from, I. 119, III. 444; citrus pests in, I. 278, 279, II. 311, 487; pests of coffee in, II. 151; forest pests in, I. 351, 354, 381, 525, II. 339, 688, III. 154, 706, 722, 729; pests of stored grain in, II. 204; pests of mangos in, II. 427, 540; melon pests in, II. 246; potato pests in, III. 321, 323; pests of prickly pear in, III. 126; rice pests in, I. 169-170, 344, 351, II. 60, 67-69, 139, 487, III. 144, 174, 345; rubber pests in, I. 351; pests of sugar-cane in I. 169, 344, 482, 509, II. 60, 67-69, III. 157; pests of tea in, I. 370, II. 60, 151, 152, 158, 430, 431, 654, III. 65, 300, 444, 488; Hymenopterous parasites from, I. 275, 278, II. 288, 322, III. 17; birds destroying insect pests in, I. 345; legislation against introduction of insect pests into, II. 273.
Indian Coffee Bug (see *Antestia cruciata*).
Indian Corn (see Maize).
Indian Meal Moth (see *Plodia interpunctella*).
Indian Wax Scale (see *Ceroplastes ceriferus*).
Indiana, insect pests of, III. 290; new Hymenopterous parasites from, I. 238, II. 288, III. 90.
indica, Glyphodes.
indicola, Leucotermes.
indicum, Monomorium; Syntomosphyrum.
indicus, Dactylopius confusus.
indiginella, Mineola (*Acrobasis, Phycis*).
Indigo (*Indigofera tinctoria*), *Pseudococcus* on, in Ceylon, II. 644; pests of, in India, I. 43-46, 482, 508, II. 60, 248, 687; Lepidopterous pests of, in Malaya, II. 323; *Prodenia litura* on, I. 482.
Indigofera spp., *Psylla isitis* on, in India, I. 45.
Indigofera tinctoria (see Indigo).
indistincta, Apate.
Indol, list of plants with odour of, III. 441.
industrius, Pipunculus.
inedius, Microdus.
inequalis, Coeliodes; Coelophora.
inermis, Anochetus; Eriococcus; Monosteira; Stictocephala.
Inesida leprosa, on *Castilloa elastica* in Tropical Africa, I. 49, 247, 414, II. 414.
Inesida obscura, on *Funtumia elastica* in Africa, II. 415.
infantilis, Schizonycha.
infausta, Aglaope.
infecta, Lycophotia.
inferens, Sesamia.
inferior, Oecophyllembius.
inferus, Gambrus.
infixaria, Hyposidra.
Inflated Wireworm (see *Corymbites inflatus*).
inflatus, Corymbites.
infracta, Anaphe.
infumator, Zele.
infuscata, Aphis; Parasa.

infuscatellus, Chilo.
Inga, Saissetia (Lecanium) nigra on in E. Africa, II. 429; pests of, in Porto Rico, III. 517.
Inga laurina, Xyleborus on, in Porto Rico, III. 517.
Inga reticulata, Aspidiotus cyanophylli on, in Chile, I. 138.
Inga vera, Xyleborus on, in Porto Rico, III. 517.
Inglisia fossilis (see *Cardiococcus*).
Ingura subapicalis (see *Paectes*).
inimicus, Deltocephalus.
Inkberry, not attacked by *Lymantria dispar* in U.S.A., III. 669; *Rhabdopterus picipes* on, in U.S.A., III. 672.
innominatus, Epiurus.
innotata, Megilla.
innuba, Diabrotica.
innumerabilis, Pulvinaria.
Ino ampelophaga (see *Procris*).
inopinata, Aonidiella; Chryseida.
inopsis, Itonida.
inornata, Thricolepis; Tiphia.
inornatus, Dacus.
inquilinum, Isosoma.
inquinata, Sturmia.
inquirendus, Allocerellus.
inquisitor, Calosoma; Pimpla.
inscripta, Ceratitis; Corsicus.
inscriptus, Aeolus.
insectella, Setomorpha.
Insecticides, chemistry and action of, I. 209, 211, 546, III. 282, 283–285; legislation concerning analysis of, in California, II. 7; laws concerning, in Montana, II. 559–562; free importation of, into Russia, III. 237; result of mixing, III. 734; and fungicides, mixtures of, II. 662; (see Bordeaux Mixture, Lead Arsenate, Lime-sulphur, Paris Green, etc.).
insidiosus, Triphleps.
insignis, Closterocerus; Eriococcus; Orthezia.
insignitella, Phyllorycter (Lithocolletis).
insperata, Paremydica.
instabilis, Ammophila; Metapodius.
instigator, Pimpla.
insuetus, Euplectrus.
insulana, Earias.
insulare, Melitomma.
insularis, Anaulacomera; Cerataphis; Chelonus; Diaulinus; Franklíniella (Euthrips); Stenodontes.
intacta, Scirpophaga.
integer, Coccotrypes; Ips; Janus.
integerrima, Datana.
integriceps, Eurygaster.
interjectus, Hyposoter; Lasius (Acanthomyops); Xyleborus.
intermedia, Amsinckia; Poliaspis.
intermedius, Eurytrachelus.
interpunctella, Plodia (Ephestia).
interpunctus, Ips.
interrogationis, Polygonia.
interrupta, Ceromasia; Cordia; Palaconeura.
interruptocostata, Rhabdocnemis.
interruptum, Limnerium.
intibi, Aphis.
intonosa, Frankliniella.
introferens, Chorizagrotis (see *Euxoa auxiliaris*).
intrudens, Syagrius.
intrusus, Scymnus.
Inula squarrisa, Pyrausta nubilalis on, in France, I. 409.
investigator, Calosoma.
invitus, Lygus.
io, Vanessa.
iota, Phytometra.
Iowa, insect pests in, I. 54, 126, III. 77, 136, 420, 495; effect of low temperature on eggs of *Lepidosaphes ulmi* in, III. 572.
Iphiaulax flavator, parasite of *Hesperophanes* spp. in France, III. 11.
Iphiaulax medianus, parasite of *Diatreaa* spp. in Br. Guiana, I. 521, II. 568, III. 384.
Ipimorpha subvexa, on Carolina poplars in Br. Columbia, III. 507.
Ipochus fasciatus, in California, III. 689.
Ipomoea, Duomitus punctifer on, in Barbados, II. 533; in Natal, III. 61.
Ipomoea aquatica, Herse convolvuli on, in Dutch East Indies, III. 645.
Ipomoea batatas (see Sweet Potato).
Ipomoea pandurata, Tetraonyx quadrimaculatus on, in U.S.A., I. 243.
Ipomoea purga (Jalap Plant), *Cryphalus jalappae* on, in Mexico, I. 351.
Ips balsameus, on Conifers in Canada, II. 25, III. 43.
Ips bidentatus (see *Pityogenes*).
Ips caelatus, on Conifers in Canada, I. 407, III. 43.
Ips calligraphus, on Conifers in Canada, I. 407.
Ips chalcographus (see *Pityogenes*).
Ips cinchonae, on cinchona in Java, I. 351.
Ips (Tomicus) confusus, on *Pinus radiata* in California, II. 115.
Ips curvidens, destroyed by birds in Germany, II. 529.
Ips emarginatus, on *Pinus ponderosa* in Br. Columbia, III. 2.
Ips grandicollis, on spruce in U.S.A., II. 361.

Ips integer, on *Pinus ponderosa* in Br. Columbia, III. 2.
Ips interpunctus, on *Pinus ponderosa* in Br. Columbia, III. 2.
Ips longifolia, on *Pinus longifolia* in India, III. 729.
Ips oregonis, on *Pinus ponderosa* in Br. Columbia, III. 2.
Ips perturbatus, on Conifers in Canada, I. 407, III. 43.
Ips sexdentatus, on cedars in Siberia, II. 222.
Ips typographus, in forests in Britain, I. 464; in forests in Central Europe, II. 621; on firs in Germany, II. 501; on Conifers in Russia and Siberia, II. 222, III. 217; bionomics of, on spruce in Sweden, II. 100, III. 767; Nematode parasites of, II. 375.
irava, Hidari.
Irbisia brachycerus, on peaches, etc., in California, I. 324, II. 555, 599.
Irbisia sericans, on grain in California, II. 555.
Ireland (see British Isles).
iridescens, Levuana.
Iridomyrmex humilis (Argentine Ant), in S. Africa, II. 299, III. 503; bionomics and distribution of, in North America, I. 309, 325-327, II. 252, 254, III. 84, 382; imported into New Jersey on roses from Germany, III. 354; associated with Coccids, I. 309, III. 382, 663.
Iridoprocne bicolor, destroying insects in Ottawa, II. 307.
Iris, pests of, in Canada, III. 515, 659; *Cacoecia costana* on, in France, I. 221.
Irish Moss (see *Fucus caragahen*).
Iron Arsenate, III. 737.
Iron Arsenite, cactus solution as an adhesive in, III. 295.
Iron Sulphate, against *Lopus sulcatus*, II. 609; against *Phlyctaenodes sticticalis*, II. 63; against *Scolytus* spp., II. 51; against olive pests, II. 634; against orchard pests, I. 362, 496, II. 35, 265, 319, 367, 389, 496, 498, 501, 651, III. 50, 66, 100, 138, 204, 214; against vine pests, II. 53, 609; and lime-sulphur, II. 247, III. 332; sprays containing, formulae for, II. 247, 498, 634; test for adulteration of copper sulphate with, III. 589.
Iron Sulphide, against *Agrilus bilineatus*, III. 162; used in conjunction with zinc arsenite, II. 561.
Iron Wood, *Eulecanium quercifex* on, II. 600.
Ironbark, Psyllidae on, in New South Wales, II. 128.
irregularis, Systates.
irrepta, Pseudaonidia.
irrorata, Atmodes.
Isandula africana, in S. Rhodesia, III. 174.
Isaniris, on *Hevea* in the Belgian Congo, III. 649; on cotton in Nyasaland, II. 277.
Isaria, ineffective against *Saissetia oleae* in California, III. 624; infesting vine moths in France, I. 524, III. 497; infesting scale-insects in Porto Rico, II. 48, III. 349; infesting locusts, III. 24.
Isaria densa, infesting May-bugs in France, I. 524; infesting *Dasychira pudibunda* in Holland, III. 196; infesting insect pests in Italy, I. 316.
Isaria destructor, infesting Coleoptera in Russia, I. 524, II. 179.
Isaria farinosa verticilloides, infesting vine moths, I. 524, II. 607, III. 211.
Isaria psychidis, imported into Argentina against *Oeceticus platensis*, II. 638.
Ischiogonus palliatus (see *Doryctes*).
Ischnaspis filiformis (see *I. longirostris*).
Ischnaspis longirostris, on rubber in Ceylon, II. 192, 644; on coffee in Br. Guiana, II. 417, 569; on coffee in Java, III. 646; on coconut in St. Vincent, II. 143.
Ischnaspis silvestrii, sp. n., in French Guiana, II. 354.
Ischnocerus marchicus, II. 222.
Ischnotrachelus humeralis, on *Hevea* in the Belgian Congo, III. 649.
isitis, Psylla.
Isle of Wight Bee Disease (see *Nosema apis*).
ismene, Melanitis.
ismeria, Phyciodes (see *Charidryas gorgone*).
isocrates, Virachola.
Isodon puncticollis, on sugar-cane in Queensland, III. 491.
Isodromus iceryae, parasite of *Sympherobius augustus* in California, II. 437; parasite of *Chrysopa* in S. Carolina, III. 25.
Isosoma, bionomics of, in Russia, II. 473, 502, III. 47, 249, 727.
Isosoma eremitum, bionomics of, on rye in Russia, II. 471, 472, 473.

Isosoma eremitum var. *nodale*, parasitised by *Homoporus vassilievi*, II. 473.
Isosoma hordei (see *I. tritici*).
Isosoma inquilinum, bionomics of, on rye and wheat in Russia, II. 471, 472.
Isosoma noxiale, bionomics of, on grain in Russia, II. 173, 471, 473.
Isosoma orchidearum (Cattleya Fly), on orchids in Austria, II. 482; on orchids in California, III. 121; imported into New Jersey on orchids from Central America, III. 469.
Isosoma rossicum, bionomics of, on rye and wheat in Russia, II. 470, 471, 472, 473.
Isosoma tritici, on grain crops in Russia, II. 173, 471.
Italian Locust (see *Calliptamus italicus*).
Italian Rye-grass, *Mocis repanda* on, in Florida, III. 327.
italicum, Graphosoma.
italicus, Calliptamus (*Caloptenus*).
Italy, I. 431, 531, II. 45, 151, 379, 401, 454, 502, 528, 620; miscellaneous insect pests in, I. 35, II. 181, 493, 628, 667, III. 6, 53, 55, 59, 123, 151, 207, 279, 382, 541, 566, 665, 745; Aphids in, I. 39, 77, 230, III. 54, 55, 665, 735, 749; *Chilocorus bipustulatus* from, imported into California, III. 689, 738; Coccids and their control in, I. 147, 172, 189, 232, 320, 392, II. 149, 296, 346, 402, 441, 450, 585, 608, 695, III. 5, 6, 11, 80, 251, 740; Coccinellids in, II. 493; control of locusts in, III. 497–499, life-history of *Phylloxera* in, III. 386, 495, 763–767; almond pests in, I. 222, II. 328, 346, III. 124, 431; citrus pests in, I. 278, 320, 380, II. 97, 268, 296, 347, 412, 585, 604, 609, III. 143, 430, 431, 763; clover pests in, II. 687, 695, III. 524; fruit pests in, I. 164, II. 419, III. 11, 80, 113, 124, 431; garden pests in, II. 347, 632, III. 12; grain pests in, I. 39, 375, 446; olive pests in, I. 390, 391, II. 298, 452, 577, 633, 698, III. 99, 171, 173, 429, 434, 705; vine pests and their control in, I. 8, 19, 230, 382, II. 13, 196, 290, 346, 418, 575, 635, 666, 679, 684, III. 127, 347, 386, 495, 658; introduction of beneficial insects into, I. 392, II. 86; legislation against plant diseases in, I. 379; regulations for the disinfection of vines in, III. 160; Entomological Research Stations in, III. 239.
Ithycerus noveboracensis (New York Weevil), attacking nursery stock in U.S.A., III. 180.
Itonida, preying on Aphids, III. 134.
Itonida inopsis, on *Pinus rigida* in New York, I. 32.
Itonida opuntiae (see *Cecidomyia*).
Itoplectis, parasite of *Recurvaria nanella* in U.S.A., III. 141; (see *Pimpla*).
Iva xanthifolia, Pemphigus betae on in Colorado, III. 351.
Ivory Nut (*Phytelaphas macrocarpa*), *Coccotrypes eggersi* in, in Ecuador, I. 351.
Ivy (*Hedera helix*), Aphids on, in Africa, III. 748; *Ceroplastes rubens* on, in Australia, III. 503; *Tetranychus* on, in Austria, II. 482; pests of, in Germany, II. 377, 632, III. 608; *Bryobia nobilis* on, in Holland, III. 201; *Clysia ambiguella* on, in Russia, III. 210; *Odontoptera bidentata* on, in Scotland, II. 498; pests of, in U.S.A., II. 186, 247, III. 357, 689; not attacked by *Aspidiotus perniciosus*, I. 472.
Ivy, Poison, not attacked by *Lymantria dispar* in U.S.A., III. 669.
Ixora, pests on, intercepted in California, III. 626; *Coccus viridis* on, in the Seychelles, I. 474, II. 566.
Ixora coccinea, Ceylonica theaecola on, in Ceylon, II. 644.
Ixora grandiflora, Coccus viridis on, in the Seychelles, I. 129.
Izal, against tobacco pests, III. 203.

J.

Jaboticaba murta, Pseudaonidia trilobitiformis on, in Brazil, III. 455.
Jackdaws, destroying noxious insects, II. 222, III. 243, 404.
Jack Pine, bark-beetles on, in Canada, II. 25.
Jack Spaniard Wasp (see *Polistes*).
jacksoni, Pulvinaria.
Jacobs (see *Euscepes batatae*).
jacobeae, Aphis; *Nysius.*
jacobsoni, Icerya.
Jak Fruit (*Artocarpus integrifolia*), *Trigonogastra megacephala* on, from Ceylon, III. 443; *Helopeltis* on, in the Gold Coast, II. 671; *Monophlebus stebbingi* on, in Br. Guiana, II. 339; *Epepeotes* spp. on, in Java, II. 535.
Jalap (*Ipomaea purga*), *Cryphalus jalappae* on, in Mexico, I. 351.
jalappae, Cryphalus.
Jalysus spinosus, on tomatoes in Montana, III. 181.

Jamaica, miscellaneous pests in, I. 253, II. 92, 519, III. 461, 650; thrips on cacao in, II. 104; scale-insects on citrus in, II. 78; pests of sugar-cane in, I. 254, II. 49, III. 726; *Anthonomus grandis* absent from, III. 12.
Jamaica Damson Plum (see *Chrysophyllum oliviforme*).
janata, Achaea.
Janella bitentaculatus (see *Athoracophorus*).
Janetiella (*Dasyneura, Perrisia*) *oenophila*, on vines in Europe, II. 355, 609, III. 113, 124.
janthinus, Orcus.
Janus, on currants in Germany, II. 642.
Janus compressus, on pear trees in Germany, II. 643.
Janus cynosbati, on oak in Germany, II. 642.
Janus integer (Currant Stem Girdler), in Ontario, I. 405.
Janus luteipes, on osiers in Germany, II. 643.
Japan, I. 34, 167, II. 641, 705, III. 625; miscellaneous insects pests in, I. 350, 519, II. 113, 125, 221, 311, 396, 419, III. 138; new Chalcids from, I. 297, II. 495; control of *Eriosoma lanigerum* in, II. 246; egg-parasites of gipsy moth in, II. 295; natural enemies of mealy-bugs in, II. 243, 286; scale-insects in, I. 62, 63, 232, II. 281, III. 80, 127, 546; *Chalcis obscurata* introduced into Hawaii from, III. 681; *Diadiplosis hirticornis* parasite of mealy-bugs in, III. 725; insect pests from, imported into other countries, I. 401, II. 134, 186, 435, III. 117, 199, 354, 413, 420, 454, 558, 567, 657, 690.
Japanese Barberry, *Gypona flavilineata* on, in Connecticut, III. 373.
Japanese Beetle (see *Adoretus umbrosus*).
Japanese Fruit Scale (see *Aulacaspis pentagona*).
Japanese Quince (see *Cydonia japonica*).
Japanese Rose Beetle, in Hawaii, III. 658.
Japanese Spindlewood (see *Euonymus japonicus*).
japonica, Cydia; Fiorinia fioriniae; Leucaspis; Serica.
Jasmine, scale-insects intercepted on, in California, III. 558; *Chrysomphalus aonidum* on, in Egypt, II. 605; *Chionaspis euonymi* on, in Italy, III. 124.
Jasminum officinale, Aulacaspis pentagona on, I. 222.
Jassus sexnotatus (see *Cicadula*).
Jatropha curcas (Physic Nut), *Ceratina viridissima* on, in Java, III. 713.
Java, I. 43, 44, III. 452; miscellaneous pests in, I. 150, III. 311; relation of ants to scale-insects in, III. 316, 663; new Aphids from, I. 139; new Chalcids from, III. 26, 62; natural enemies of *Cosmopolites sordidus* in, II. 506; fruit-flies in, I. 157, III. 3; bionomics of *Tetranychus telarius* (*bimaculatus*) on cassava in, III. 632; cacao pests in, I. 3–5, 56, 57-62, 350, III. 311-313, 589, 661; coconut pests in, II. 690, III. 311, 315, 713; coffee pests in, I. 5, 122, 351, II. 241, 267, 535, III. 3, 314, 317, 589, 646-648, 662, 663, 713; rubber pests in, I. 355, II. 414, 415, 533, 535, III. 713; sugar-cane pests in, I. 169, 351, II. 140, III. 62, 317-320, 382-386; tea pests in, II. 157, 430, III. 434, 662; tobacco pests in, I. 14, III. 744; pests from, imported into U.S.A., II. 460, III. 455.
javanus, Plaesius.
javensis, Perissopterus.
Jay, destroying noxious insects, II. 223, III. 196.
Jerusalem Artichoke (see Artichoke).
Jessamine (see Jasmine).
Jeyes' Fluid, against wood-boring beetles, I. 422; against termites, I. 465.
Jimson Weed (*Datura*), *Prodenia litura* on, in the Philippines, I. 482.
jocosus, Tachyporus.
johannis, Bibio.
Johnson Grass (see *Sorghum halepense*).
johnsoni, Contarinia.
jonesi, Eutrixoides.
jucundellus, Crambus.
jucundus, Ichneumon.
judicanda, Poecillis.
juglandella, Gracilaria.
juglandicola, Callipterus; Chromaphis; Lachnus.
juglandis, Conotrachelus; Eulecanium (*Lecanium*); *Phyllereus.*
Juglans (see Walnut).
Juglans californica (California Black Walnut), Aphids on, II. 251, III. 142.
Juglans cinerea (Butternut), pests of, in U.S.A., I. 181, III. 552, 572; not attacked by *Lymantria dispar* in U.S.A., III. 669.

Juglans cordiformis, Conotrachelus juglandis on, in Connecticut, I. 181.
Juglans mandshurica, Conotrachelus juglandis on, in Connecticut, I. 181.
Juglans nigra (Black Walnut), pests of, in Connecticut, I. 181; not attacked by *Lymantria dispar* in U.S.A., III. 669.
Juglans regia (see Walnut).
Juglans sieboldiana, Conotrachelus juglandis on, in Connecticut, I. 181.
juglans-regiae, Aspidiotus.
Jujube (see *Zizyphus vulgaris*).
juliana, Coccinella.
Julus guttulatus (see *Blaniulus*).
Julus londiniensis, on lucerne in Europe, I. 526.
Julus pulchellus, on hops in England, II. 564.
Julus unilineatus, on lucerne in Europe, I. 526; on beet in Russia, I. 487.
junci, Lixus.
junctilobius, Aspidiotus.
junctolineata, Melitara.
June Beetle (see *Lachnosterna*).
June Berry (see *Amelanchier canadensis*).
June Bug (see *Allorrhina nitida*).
Jungle Fowl (see *Gallus gallus*).
Juniper, resistant to gipsy moth, I. 35, 148, II. 711, III. 669; Tortricid moth intercepted in Hawaii on, from Japan, III. 413; *Argyresthia arceuthina* on, in Holland, III. 741; pests of, in U.S.A., III. 546, 567, 580.
Juniper Berry Chalcid (see *Eurytoma juniperinus*).
Juniper Plant Bug (see *Chlorochroa uhleri*).
Juniper Webworm (see *Phalonia rutilana*).
juniperi, Geniocerus ; *Hylotrupes.*
juniperinus, Eurytoma ; *Rhagoletis.*
Juniperus virginiana, pests of, in U.S.A., III. 567, 580.
junodi, Chalioides.
Justicia gendarussa, Saissetia hemisphaerica on, in the Seychelles, II. 269.
Jute (*Corchorus*), pests of, in India, I. 482, 508, II. 60, 248; pests of, in the Philippines, I. 482.
juvencus, Sirex.

K.

Kaffir corn, *Laphygma exempta* on, in Rhodesia, III. 359; *Draeculacephala mollipes* on, in U.S.A., III. 576.
Kainit, against *Contarinia pyrivora,* III. 108, 550; against *Oecophylla smaragdina* in Java, III. 647; against *Phyllopertha horticola,* III. 107; against termites, I. 513, II. 269; against wireworms, I. 378; unsatisfactory as an insecticide, II. 349; ineffective against *Crambus caliginosellus,* II. 525; against strawberry pests, III. 366.
Kakothrips robustus (Pea Thrips), on peas and beans in Britain, III. 9, 159, 279; on leguminous plants in Denmark, III. 246, 698; in France, II. 305, 395, 420; parasites of, II. 488; synonyms of, II. 346, III. 9, 279.
Kale, *Exomias pellucidus* on, in England, III. 564; *Pieris monuste* on, in Porto Rico, III. 477; *Hellula undalis* on, in Rhodesia, II. 235; pests of, in U.S.A., I. 476, II. 160, 161; (see Cabbage).
Kaliosysphinga dohrni, on alders in New Jersey, II. 386, III. 194.
Kaliosysphinga ulmi (Elm Leaf-miner), on elms in Holland, III. 743; on elms in New Jersey, II. 589; measures against, in U.S.A., II. 6.
kalmi, Lygus.
Kalmia, Pomphopoea unguicularis on, in U.S.A., I. 243.
Kalmia latifolia (Mountain Laurel), *Tingis rhododendri* on, in Holland, II. 641, III. 743; pests of, in U.S.A., I. 243, III. 193, 685.
Kamani Nuts (see *Terminalia catappa*).
Kamerun, *Ceratitis morstatti,* sp. n., on kola nuts in, I. 91; Coccidae of, II. 410; termites from, II. 610; *Serangium giffardi* in, II. 348; parasites of fruit-flies in, I. 388, III. 433; San Thomé borer in, III. 661; pests of cultivated plants in, I. 349, 351; rubber pests in, I. 351, II. 414, 415; *Dacus momordicae* from, III. 748.
kamerunicus, Derelomus.
kamtshatkanum, Acyrthosiphon.
kandyensis, Walkeriana.
Kansas, I. 77; *Aphaereta sarcophagae* parasite of *Sarcophaga kellyi* in, III. 151; bionomics of *Blissus leucoptera* in, I. 534, II. 226, 227, 383, 384, III. 565; *Cirphis unipuncta* in, III. 371; *Diabrotica longicornis* in, I. 429; control of grasshoppers in, II. 249, 542, III. 297; parasitic

Hymenoptera of, III. 151; *Mayetiola destructor* in, II. 225; *Myochrous denticollis* on maize in, III. 573; *Prosopothrips cognatus* on wheat in, III. 577; *Saperda candida* in, III. 586; *Scotogramma* (*Mamestra*) *trifolii* on beet in, I. 352; pests from, intercepted in California, III. 558.
Kansas Bait, against grasshoppers and locusts, III. 451, 553; against *Lycophotia margaritosa*, III. 469; formulae for, II. 249.
Kapok Tree (see *Eriodendron anfractuosum*).
karnyi, Gynaikothrips.
Karschomyia, preying on Coccidae, III. 134.
Karschomyia cocci (see *Diadiplosis*).
Kawani, *Ceratitis capitata* on, in Hawaii, I. 374.
kelloggi, Leucaspis.
kellyi, Sarcophaga.
Kelp (*Salsola*), *Temnorrhinus brevirostris* on, in France, II. 90.
Kentia Palms, *Heliothrips haemorrhoidalis* on, in Austria, II. 482; insect pests intercepted on, in California, III. 420; scale-insects on, I. 101, II. 436, 482.
Kentucky, insect pests in, I. 53; tobacco pests in, I. 352, 601; pests from, intercepted in quarantine, III. 289.
Kermes, on *Quercus agrifolia* in California, II. 115.
Kermes cockerelli, on *Quercus chrysolepis* in California, II. 245.
Kermes galliformis, parasitised by *Euclemensia bassettella* in Canada, I. 400.
Kermes mirabilis, sp. n., on *Quercus* sp. in California, III. 13.
Kermes waldeni, sp. n., on oaks in Connecticut, II. 253.
Kermes roboris, on oak in Russia, I. 488.
Kermes variegatus (see *K. roboris*).
Kerosene, relative attractiveness of, to *Ceratitis capitata*, III. 28; in traps for fruit-flies, III. 30, 158, 567; effect of, on insects, III. 692; emulsifier for, I. 552.
Kerosene (Paraffin) Emulsion, formulae for, I. 128, 167, 388, 433, II. 47, 77, 110, 204, 291, 387, 416, 561, 612, 628, 701, III. 26, 81, 96, 218, 282, 370, 396, 409, 417, 442, 528, 599, 609, 619, 623; cost of, II. 70; cannot be combined with lime-sulphur, III. 737; (see Paraffin and Petroleum).
Kerosene-lime Emulsion, formulae for, II. 468, 488, 701.
Kerosene-lysol Emulsion, against froghoppers, I. 320, II. 61, 96, 464.
Kerria japonica, Aulacaspis pentagona on, I. 222.
kersteni, Anomala.
Kestrel, destroying *Dendrolimus pini*, II. 222.
Khaya senegalensis (African Mahogany), pests of, in E. Africa, I. 247, 351, 414, 415; Lepidopterous larvae on, in S. Nigeria, II. 108; pests of, in Nyasaland, II. 277, 340; scale-insects on, II. 146, 425.
Kicksia elastica (see *Funtumia*).
Kildeer, destroying noxious insects, II. 567, III. 380.
kilimana, Callispa.
King Crow, destroying noxious insects, I. 345, III. 24.
Kingbird (see *Tyrannus tyrannus*).
Kingfishers, destroying locusts, I. 68.
kitcheneri, Rhogas.
Kite, destroying insects, I. 345.
klugi, Orthorrhinus.
Knapsack Sprayers, use of, I. 78, II. 309, 565, 686.
Knapweed (*Centaurea nigra*), *Kakothrips robustus* on, in Britain, III. 279.
Knol-khol, *Bagrada picta* on, in Ceylon, I. 89.
Knorhaan, destroying locusts, II. 574.
Knot-grass (see *Polygonum aviculare*).
koebelei, Anastatus; *Ceronema*; *Eupelmus*; *Polysphincta*; *Ichneumon.*
koehleri, Purpuricenus.
Kohl-rabi, *Dorylus orientalis* on, in Ceylon, II. 644; pests of, in England, III. 288, 564; *Meligethes aeneus* on, in Germany, II. 501; *Hellula undalis* on, II. 235.
Kola (*Cola acuminata*), pests of, in the Gold Coast, II. 107, 141, 672; cacao moth on, in Java, I. 58; *Ceratitis morstatti*, sp. n., on, in Kamerun, I. 91; pests of, in Nigeria, II. 108, III. 166, 167, 547.
Kola Fruit-fly (see *Ceratitis colae*).
kolae, Balanogastris.
kollari, Cynips.
Kop-Kop Ants, palms infested with, avoided by *Castnia daedalus* in Br. Guiana, II. 57.
Korsun Green, formula for, I. 489.
kotinskyi, Apantelicus.
koyi, Poecilus.
kraussi, Dociostaurus (*Stauronotus*); *Thercladodes.*

Kreso, against rhinoceros beetle in Jamaica, III. 650.
krugii, Megalopyge.
kühniella, Ephestia.
Kumpassia malaccensis, attacked by *Coptotermes gestroi* in Java, I. 355.
Kunzea capitata, Pulvinaria tecta on, in Australia, III. 503.
Kusum (*Schleichera trijuga*), effect of oil of, on *Serinetha augur*, III. 755.
kuvanae, Chilocorus ; Schedius.
kuwanai, Aeolothrips.
Kuwania britannica, sp. n., on birches in England, II. 705.
Kuwanina parva (*Cryptococcus nudatus*), on cherries in Japan, III. 546 ; in New Zealand, III. 721.
Kweek Grass (see *Cynodon dactylon*).

L.

Labidostomis longimana, on wheat in Astrachan, III. 221.
Labidostomis pallidipennis, on wheat in Astrachan, III. 221.
Labidostomis (*Clytra*) *faxicornis*, on vines in Italy and Sicily, III. 33, 112.
Labidura riparia, destroying vine moths in Russia, III. 211.
laboulbenei, Maenas.
Laboulbeniaceae, parasitic on insects, II. 269.
Labrorychus debilis var. *phlyctaenodis*, parasite of *Phlyctaenodes sticticalis* in Russia, I. 535, III. 220.
Labrorychus (*Anomalon*) *tenuicornis*, parasite of *Hyponomeuta malinellus* in Rumania, III. 344.
Labuan, *Cryptorrhynchus mangiferae* in mango in, II. 540.
laburnella, Leucoptera (*Cemiostoma*).
laburni, Aphis.
Laburnum, pests of, in Britain, II. 655, III. 718 ; *Leucoptera laburnella* on, in Holland, III. 741.
Lac Insect (see *Tachardia lacca*, and *T. albizziae*).
lacca, Tachardia.
lacera, Mylabris variabilis.
lacertosus, Ephedrus.
Lace-wing Flies (see *Chrysopa* and *Hemerobius*).
lachesis, Acherontia.
Lachnidium, infesting locusts, III. 24.
Lachniella thujafolia, sp. n., on *Thuja orientalis* in the Transvaal, II. 276.
Lachnodius greeni, on coffee in Madagascar, II. 425.
Lachnopus, on cotton in the West Indies, I. 263, III. 22.
Lachnopus curvipes, on cotton in the Virgin Islands, III. 22.
Lachnopus valgus, on cotton in Anguilla, III. 22.
Lachnosterna (White Grubs, June Beetles, Hard-backs, May Beetles, Moutoucs), bionomics of, in Canada, I. 168, 400, 405, II. 204, III. 70 ; hyperparasites of, in Hawaii, III. 681 ; on sugarcane in Mauritius, II. 46, 612, III. 730 ; bionomics and control of, in U.S.A., I. 53, 528, II. 121, 159, 585, 639, 640, 693, III. 17, 87, 162, 249, 299, 355, 379, 425, 472, 512, 531, 584, 691 ; natural enemies of, in U.S.A., II. 708, III. 87, 249, 299, 379, 517, 584, 691 ; bionomics and control of, in the West Indies, I. 184, 253, 389, II. 48, 87, 88, 639, III. 299, 517.
Lachnosterna arcuata, in U.S.A., I. 185 ; *Sarcophaga* parasitising in U.S.A., III. 452.
Lachnosterna dubia, in Minnesota, II. 693.
Lachnosterna fraterna, in Connecticut, II. 183.
Lachnosterna fusca, on strawberries in U.S.A., I. 475, II. 183, 244, 693.
Lachnosterna grandis, distribution of, in U.S.A., II. 693.
Lachnosterna patens, on cacao in the West Indies, I. 253, III. 663.
Lachnosterna patruelis, on sugarcane in the West Indies, I. 253, 263.
Lachnosterna rugosa, in North Minnesota, II. 693.
Lachnosterna tristis, life-history of, in U.S.A., I. 185.
Lachnus, II. 186.
Lachnus abietis (Spruce Gall Louse), in New Jersey, III. 192.
Lachnus fagi, on beech in Norway, III. 697.
Lachnus fasciatus, on *Picea excelsa* in England, III. 633.
Lachnus juglandicola, on walnut in Russia, III. 226.
Lachnus laricifoliae, sp. n., on *Larix occidentalis* in Oregon, III. 588.
Lachnus oregonensis, on *Pinus* in Oregon, III. 588.
Lachnus parvus, sp. n., food-plants of, in Oregon, III. 588.
Lachnus persicae, on peaches, etc., in Russia, II. 73, 79, 515, 715.
Lachnus piceae (Giant Spruce Aphis), on spruce in Ireland, II. 656.

Lachnus pinicola, bionomics of, on Conifers, I. **120.**
Lachnus ponderosae, on *Pinus ponderosa* in California, II. **251.**
Lachnus rosae, on roses, III. **748.**
Lachnus thujafolinus, on *Thuja* in California, II. **251.**
Lachnus viminalis (Giant Willow Aphis), on willows in Britain, II. **656**, III. **660**; on willows in Egypt, III. **749**; on willows in Russia, III. **13**, **220.**
Lacon murinus (see *Brachylacon*).
Lacon rectangularis, on wheat in U.S.A., III. **300.**
Lactate of Nicotine, experiments with, as an insecticide, II. **50.**
lacteicolor, *Apanteles.*
lactella, *Endrosis.*
lactinea, *Amsacta.*
lactis, *Termes.*
Lactuca pulchella, *Phytometra californica* on, in Montana, III. **457.**
lactucae, *Amphorophora*; *Aphis*; *Cucullia*; *Eriophyes*; *Macrosiphum*; *Rhopalosiphum.*
lactucarius, *Pemphigus.*
lactucellum, *Rhopalosiphum.*
lacunana, *Olethreutes.*
Laelia adara, on sugar-cane in Java, I. **169.**
Laelia suffusa, on sugar-cane in the Far East, I. **169**, II. **490.**
Laemophloeus hypobori, predaceous on *Hypoborus ficus* in France, III. **10.**
Laemophloeus minutus, effect of heat on, II. **703.**
Laemophloeus pusillus (Biscuit Beetle), in cotton-seed and rubber in E. Africa, I. **414**, II. **2**, **415**, **579.**
Laemophloeus testaceus, in stored grain in Russia, II. **40**, III. **46.**
laetatorius, *Bassus* (*Diplazon*).
Laetilia coccidivora, preying on *Dactylopius confusus* in U.S.A., I. **81.**
laetus, *Ichneumon*; *Oxycarenus.*
laevigana, *Tortrix.*
laevigata, *Evania.*
laevigatae, *Macrosiphum.*
laevigatella, *Argyresthia.*
laevis, *Porcellio.*
laeviusculus, *Progenius.*
laeviventris, *Meteorus.*
Lagarotis diprioni, sp. n., parasite of *Lophyrus lecontei* in U.S.A., III. **658.**
Lagarotis virginianus, sp. n., parasite of *Lophyrus lecontei* in U.S.A., III. **658.**
Lagerstroemia, *Heterusia cingala* on, in Ceylon, III. **61.**
lagerstroemiae, *Eriococcus.*
Lagetta lintearia, *Heortia vitessoides* on, in Ceylon, II. **644.**
Lagochirus obsoletus, on cassava in Cuba, III. **367.**
lagosianus, *Bracon.*
Lagria hirta, on vegetable marrow in France, I. **504.**
Lagria villosa, on maize and rubber in East Africa, I. **414**, II. **415**; on leguminous plants in Nyasaland, II. **277**; on cotton, maize, etc., in Nigeria, II. **106–108**, III. **164**, **166.**
Lagria viridipennis, on cotton, maize, etc., in Nigeria, II. **106**, III. **166.**
lahorensis, *Prospaltella.*
Lalang Grass, locusts on, in Malaya, II. **110**, **134.**
lamborni, *Aslauga*; *Rhinopsylla.*
Lamb's Quarters (see *Chenopodium album*).
lambertianae, *Conophthorus.*
Lamium (Dead Nettle), *Cladobius farinosus* on, in Italy, III. **54.**
Lamium purpureum, *Chaitophorus montemartinii*, sp. n., on, in Italy, III. **54.**
Lampides baetica, on lucerne in Europe, I. **527**; on peas in France, II. **420**; bionomics of, I. **411**; parasitised by *Echthromorpha fuscator* in Hawaii, III. **682**; on pigeon-peas in Nigeria, III. **167.**
Lampronia rubiella (see *Incurvaria*).
Lamproptera, on tomato in Brazil, III. **388.**
Lamtoro (see *Leucaena glauca*).
Landolphia, scale-insects on, in East Africa, II. **146**, **429.**
Landolphia kirkii, scale-insects on, in Ceylon, II. **191**, **192**, **644.**
lanestris, *Eriogaster* (*Lasiocampa*).
langi, *Leucohimatium.*
lanigerum, *Eriosoma* (*Schizoneura*).
Lanius excubitor (Grey-backed Shrike), destroying *Dendrolimus pini*, II. **222.**
lankeswara, *Papilio.*
Lantana, *Aleurodes vaporariorum* on, in England, III. **285**; insects introduced to destroy, in Hawaii, III. **757**; destruction of, in New Caledonia, I. **62.**
Lantana camara, *Porthezia insignis* on, in Réunion, II. **216.**
Lantana Bug (see *Orthezia insignis*).
Lantana Leaf-bug (see *Teleonemia lantanae*).
lantana, *Eucosma* (*Crocidosema*).
lantanae, *Teleonemia.*
lantanella, *Cremastobombycia.*
lanuginosum, *Eriosoma* (*Schizoneura*).

lanuginosus, Neuroterus.
Lapageria, Aspidiotus hederae imported into New Jersey on, III. 469.
lapathi, Cryptorrhynchus.
Laphygma exempta, bionomics of, on tobacco in Rhodesia, III. 359.
Laphygma (*Caradrina, Spodoptera*) *exigua* (Pigweed Caterpillar), on maize in Egypt, I. 501; on maize in France, I. 409; on maize in the Far East, II. 489; in Hawaii, III. 363; bionomics of, in Rhodesia, I. 288, III. 359; on sugar-beet, cotton and lucerne in Russia, I. 536, II. 248, 262, 314, 423, 466, 715, III. 221, 544; geographical distribution of, II. 248; natural enemies of, II. 248, 424, 515, 629.
Laphygma frugiperda (Corn Bud Worm, Corn Ear Worm, Fall Army Worm, Rice Caterpillar), on sugar cane, etc., in British Guiana, I. 318, 521, II. 58, 568; on cotton, sugar cane, etc., in the West Indes, I. 181, 184, 328, 389, II. 49, 87, 574, III. 134, 477, 555; on maize, lucerne, etc., in U.S.A., I. 53, 225, 264, 517, 518, 528, 547, II. 120, III. 326, 370, 426, 684; natural enemies of, I. 16, 182, 184, 518, 521, 547, II. 49, III. 134, 477, 684.
laphygmae, Meteorus.
lapidarius, Bombus.
Lapland, forest pests in, II. 243.
Lappa comunis (see Burdock).
lappae, Agromyza; Aphis.
lappella, Metzneria (*Parasia*).
lapponicus, Chermes.
Lapwing, destroying wireworms in the British Isles, I. 378.
Larch (*Larix*), pests of, in Britain, I. 119, 120, 387, 434, II. 54, 498, III. 190, 277, 459, 633, 676, 715; pests of, in Canada, I. 407, II. 25, III. 19; *Xyleborus xylographus* (*saxeseni*) on, in Germany, II. 486; pests of, in Holland, III. 196, 741; pests of, in Italy, III. 124, 382; *Odontria puncticollis* on, in New Zealand, I. 194; pests of, in Russia, II. 220, 221, 372, 514, III. 105, 223, 592-598; *Chermes* spp. on, in Switzerland, III. 343; pests of, in U.S.A., I. 201, II. 710, III. 149, 668; resistant to gipsy moth in U.S.A., II. 711; (see *Larix* spp.).
Larch Case-bearer (see *Coleophora laricella*).
Larch Miner (see *Coleophora laricella*).
Larch Sawfly (see *Lygaeonematus erichsoni*).
Larch Woolly Aphis (see *Chermes strobilobius*).
lardarius, Dermestes.
Larger Corn-stalk Borer (see *Diatraea saccharalis*).
Laria (see *Bruchus*).
laricella, Coleophora.
lariciatus, Chermes.
laricifoliae, Lachnus.
laricinellae, Entedon; Pteromalus.
laricis, Chermes (*Adelges*) (see *C. strobilobius*); *Megastigmus; Perrisia.*
Larinus, Braconid parasites of, II. 426.
Larix (see Larch).
Larix europaea, Chermes viridis on, in Switzerland, III. 343.
Larix occidentalis, pests of, in U.S.A., III. 588, 670.
Larix sibirica, Chermes viridulus on, in Russia, III. 596.
Larks, destroying noxious insects, I. 17, 42, 360, 518, II. 227, 525, 574, III. 297, 379, 380, 404.
larvalis, Agaonella.
larvarum, Tachina.
lasianthi, Lepidosaphes.
Lasiocampa, parasitised by *Trichogramma semblidis* in Russia, I. 541.
Lasiocampa castrensis (see *Malacosoma*).
Lasiocampa lanestris (see *Eriogaster*).
Lasiocampa neustria (see *Malacosoma*).
Lasiocampa quercus, I. 50.
Lasiocampa trifolii, on lucerne in Europe, I. 527.
lasiocampae, Megastigmus.
Lasioderma serricorne (Cigarette Beetle), bionomics of, in the Philippines, I. 170; unaffected by X-rays, I. 181; in tobacco in Rhodesia, I. 289; infesting biscuits, I. 292; in U.S.A., III. 262, 330; in stored tobacco, I. 289, 525, II. 630; natural enemies of, I. 170, 525, II. 520, 630; measures against, I. 312, III. 330.
Lasioderma testaceum, in dried tea in Ceylon, III. 157; infesting biscuits, I. 89.
Lasiophthicus (*Catabomba, Syrphus*) *pyrastri,* predaceous on Aphids, II. 358, 527, 599, III. 142, 220.
Lasioptera cerealis (see *Prolasioptera*).
Lasioptera obfuscata (see *Lasiopteryx*).
Lasiopteryx, on cassava in the West Indies, III. 367.

Lasiopteryx obfuscata, on raspberries in France, II. 16.
Lasius alienus, on vines in Italy, III. 112.
Lasius flavus, in Holland, III. 743; destroyed by lime-water, III. 54.
Lasius fuliginosus, associated with Aphids in Britain, III. 501, 633.
Lasius (*Acanthomyops*) *interjectus*, associated with *Eriosoma lanigerum* in U.S.A., III. 446; in U.S.A., III. 709.
Lasius niger americanus (Cornfield Ant), bionomics of, in U.S.A., III. 136; destroying *Cydia pomonella* in U.S.A., III. 476.
Laspeyresia, on Douglas fir in U.S.A., III. 670.
Laspeyresia pomonella (see *Cydia*).
Laspeyresia strobilella (see *Cydia*).
lataniae, Aspidiotus; *Cerataphis*.
latelineolata, Epicauta.
lateralis, Anantha; *Apanteles*; *Dolopius*; *Erethistes*; *Hyperaspis*; *Lixus* (see *L. lauferi*); *Lygaeus*; *Oncometopia*; *Phytomyza*.
latericius, Termes.
Latheticus oryzae, not found in biscuits, I. 293.
Lathridius bergrothi, not injurious to flour in Russia, II. 40.
Lathrobium sphaericolle (see *Apocellus*).
Lathrodectus tredecimguttatus, distribution and bionomics of, in Russia, III. 537.
Lathromeroides fasciativentris, sp. n., from North Queensland, III. 256.
Lathyrus (Everlasting Pea), *Melolontha melolontha* on, in Holland, III. 198.
Lathyrus ensifolius, Acyrthosiphon pisi on, in Russia, III. 703.
Lathyrus latifolius, Acyrthosiphon pisi on, in Russia, III. 703.
Lathyrus odoratus (see Sweet Pea).
laticeps, Bruchobius.
laticinctus, Microdus.
laticolle, Epipedosoma.
laticollis, Prionus; *Xyleborus*.
laticostalis, Glyphodes.
latifascia, Calymniodes.
latinasus, Carpophilus.
latipennis, Oecanthus.
latithorax, Trypopremnon.
latiuscula, Cirphis.
latiusculus, Exochomus; *Listronotus*.
latratus, Sagaritis.
latus, Corymbites.
Laurel, *Trioza alacris* on, in Austria, II. 482; *Otiorrhynchus sulcatus* on, in Holland, I. 385; pests of, in North Italy, III. 124; *Trioza litseae* on, in Réunion, II. 216; not attacked by *Lymantria dispar* in U.S.A., III. 669; *Aspidiotus perniciosus* on, II. 390.
Laurel, Mountain (see *Kalmia latifolia*).
Laurel, Red, *Aspidiotus hederae* (*nerii*) on, in France, I. 376.
Laurel Psylla (see *Trioza alacris*).
lauri, Aonidia; *Lecanium* (see *Coccus hesperidum*); *Heilipus*.
Laurus camphora, Xyleborus camphorae on, in Mauritius, I. 351.
Laurus nobilis (Sweet Bay), *Batodes angustiorana* on, in Holland, III. 199; *Chrysomphalus aurantii* on, in South Australia, II. 584; scale-insects intercepted on, in U.S.A., II. 186, III. 625; *Coccus hesperidum* (*lauri*) on, in France, I. 376.
lavagnei, Monolexis.
Laverna atra, on apples and pears in Russia, II. 342.
Laverna hellerella, on apples in Russia, II. 342, III. 610.
lavinia zonalis, Precis.
Lawana (*Poeciloptera*) *candida*, bionomics of, on coffee in Java, III. 314.
Lawn Cutworm (see *Crambus*).
Lawns, pests of, I. 275, 473, 528, II. 120, 122, 123, 244.
laxmani, Onconotus.
Laycotin, formula for, in vineyards, II. 681.
Lead, Red, as a dusting powder, III. 361.
Lead, White, formula for, against *Eriosoma lanigerum*, I. 274, 433; against *Saperda candida*, III. 587.
Lead Acetate, (Arsenate in error) in preparation of Djipsin, II. 720; used in preparation of lead arsenate, II. 446, 552, III. 747; against vine pests, II. 553.
Lead Arsenate, against orchard pests, I. 85, 159, 168, 179, 196, 202, 226, 277, 281, 384, 390, 425, 426, 452, 475, 517, II. 3, 14, 15, 23, 77, 188, 190, 247, 286, 298, 301, 358, 432, 457, 459, 484, 493, 541, 584, 604, 642, 709, 710, III. 72, 78, 79, 97, 158, 180, 250, 258, 259, 260, 269, 294, 372, 381, 408, 413, 414, 415, 419, 445, 456, 492, 493, 508, 514, 527, 554, 559, 581, 588, 673, 718, 719, 748, 758; against vine pests, I. 72, 220, 277, 298, 451, II. 166, 194, 211, 229, 309, 398,

399, 400, 405, 409, 410, 421, 446, 458, 551, 552, 575, 667, 673, III. 158, 181, 427, 525, 558; against pests of garden crops, I. 219, 329, 419, 518, II. 4, 19, 161, 236, 361, 438, 645, III. 12, 557; against tobacco pests, I. 111, 272, 273, 302, 312, 352, II. 601, 602, 630, III. 268; against pests of forest and shade trees, I. 12, 63, 232, II. 94, 120, 485, 601, III. 162, 180, 199, 573; against cacao pests, I. 270, 425, II. 59, 70, 141, 142, 146, 460, III. 276, 368, 583, 661; against asparagus pests, I. 296, II. 247; against pests of cereals, I. 142, 155, 328, II. 302, 520, III. 449, 450; against potato pests, I. 377, 476, II. 118, 119, 302, 401, 418, 419, 629, III. 373; against tea pests, II. 654, III. 488; against cabbage pests, III. 363, 374, 471; against pests of roses, II. 641, III. 265; against coconut pests, I. 425, II. 691, III. 754; against cotton pests, I. 272, 273, 350, II. 694; against citrus pests, II. 145, 311, 511, III. 144, 654; against brown-tail and gipsy moths, I. 481, II. 156, 295, 394; against cutworms and army worms, II. 381, 488, 521, 565, III. 78, 86, 176, 178, 301, 360, 369, 371, 449, 450, 457, 471; against flea-beetles, I. 298, 300, III. 328; against locusts and grasshoppers, I. 67, II. 60, III. 618, 649, 652; against sawflies, I. 53, 101, 285, 178, 283, II. 55, 185, 244, 512, 576, 584, 677, III. 79, 97, 158, 180, 181, 372, 408, 410, 573; against wood-borers, I. 423, II. 183, 644, 699, III. 12, 673, 751; against Sphingid larvae, II. 533, 568, 573, III. 268, 472; against lucerne and lawn pests, I. 473; ineffective against *Crambus caliginosellus*, II. 525; ineffective against wireworms, II. 304, III. 272; ineffective against vine moths, II. 195, 685; as a spray, formulae for, I. 40, 42, 131, 219, 298, 300, 348, 367, 384, 425, 426, 518, II. 60, 110, 236, 359, 552, 560, 720, III. 26, 90, 162, 174, 181, 193, 258, 265, 269, 301, 325, 326, 371, 413, 419, 427, 456, 508, 512, 554, 659, 687, 747; toxicity and properties of, I. 284, 418, II. 32, 195, 378, 387, 388, 399, 560, III. 264, 283, 325, 361, 759; chemical composition of, I. 197, II. 546, 560, III. 427, 655–657, 747; adhesives added to, III. 79, 193, 295, 347, 456, 512, 659; in dusting powders, I. 111, II. 694, III. 270, 295, 449; in poisoned baits against fruit-flies, III. 36, 413, 756; and Bordeaux mixture, III. 79, 80, 514; and lime-sulphur, II. 389, III. 260, 301, 514, 554, 719; and Paris green, III. 195; and nicotine, III. 301, 687; result of mixing with other insecticides, III. 734, 737; increasing toxicity of polysulphides, III. 448; little used in the Dutch East Indies, III. 645; in agriculture in France, I. 200, II. 125, 398; zinc arsenite as substitute for, I. 407; use of, prohibited in Sweden, III. 347; forbidden as an insecticide in Germany, II. 195; (see Djipsin).

Lead Chromate, against cacao pests, II. 59, 141, III. 165; against coffee pests, II. 591; against cotton pests, II. 107; against Lepidoptera on oaks, formula for, II. 620; against orchard pests, III. 676; against tea pests, III. 488–490; ineffective against *Euplexia conducta*, II. 139; ineffective against *Limonius californicus* II. 304; ineffective against *Athalia colibri* (*spinarum*), III. 109, 542; as an insecticide, I. 286, III. 109, 361, 490; cactus solution as an adhesive in, III. 295; cost of, II. 620; preparation of, III. 109.

Lead Oxide, percentage of, in Bordeaux and lead arsenate mixture, II. 546.

Leadwood (see *Combretum porphyrolepis*).

Leaf-blister Mite of Cotton (see *Eriophyes gossypii*).

Leaf-cutter Bees, in Arizona, I. 180.

Leaf-cutting Ants (see *Atta*).

Leaf-hoppers, I. 180, 222, 259, 276, 305, 520, 522, II. 58, 119, 495, 533, III. 26, 70, 529, 556; (see *Empoasca* and *Typhlocyba*).

Leaf-miner of Camphor (see *Acrocercops*).

Leaf-miner of Citrus (see *Phyllocnistis citrella*).

Leaf-miners, I. 55, 84, 200, II. 46, 307; (see *Agromyza*).

Leaf-rollers, II. 190, 459, 604, 629, III. 358.

Leaf-roller of Cotton (see *Sylepta derogata*).

Leaf Spot Disease, of strawberries in Wisconsin, III. **425.**
Leather Beetle (see *Dermestes vulpinus*).
Leather Jackets (see *Tipula*).
Lebbek Tree (see *Albizzia lebbek*).
lecaniella, Blastobasis.
lecanii, Cephalosporium; *Coccophagus.*
Lecaniobius cockerelli, parasite of black scale in the West Indies, II. **286.**
lecaniodes, Rhizococcus.
Lecaniodiaspis acaciae, on *Acacia calamifolia* in Australia, III. **751.**
Lecaniodiaspis atherospermae, on *Atherosperma moschata* in Australia, III. **751.**
Lecaniodiaspis convexus, sp. n., on *Eucalyptus* in Australia, III. **751.**
Lecaniodiaspis melaleucae, on *Melaleuca leucadendron* in Australia, III. **751.**
Lecaniodiaspis microcribraria, sp. n., on *Epacris impressa* in Australia, III. **751.**
Lecaniodiaspis newmani, sp. n., on *Eucalyptus* in Australia, III. **751.**
Lecanium, Blastobasis lecaniella preying on, in Br. Guiana, I. **343**; on cotton in East Africa, I. **246**, II. **581**; on mangos in Grenada, III. **583**; intercepted on mangos from Java, II. **460**; on plums in Missouri, I. **282**; on fruit trees in Russia, I. **460**, **536**, II. **43**, **331**, **700**; infested with *Cephalosporium lecanii*, III. **501.**
Lecanium africanum (see *Coccus*).
Lecanium anthurii (see *Saissetia*).
Lecanium armatum (see *Ctenochiton spinosus*).
Lecanium berberidis (see *Eulecanium*).
Lecanium bituberculatum (see *Eulecanium*).
Lecanium canadense (see *Eulecanium*).
Lecanium cappari, sp. n., on *Capparis mitchelli* in Australia, III. **652.**
Lecanium casuarinae, on *Casuarina* in Australia, III. **652.**
Lecanium catori, sp. n., on kola nut in Nigeria, III. **547.**
Lecanium caudatum (see *Coccus*).
Lecanium cerasi (see *Eulecanium*).
Lecanium corni (see *Eulecanium*),
Lecanium cymbiforme (see *Eulecanium persicae*).
Lecanium depressum (see *Saissetia*).
Lecanium discrepans, on tea in Ceylon, III. **157**; associated with *Oecophylla smaragdina* in Java, I. **150.**
Lecanium elongatum (see *Coccus*).
Lecanium expansum (see *Paralecanium*).
Lecanium filicum (see *Saissetia*).
Lecanium frontale, on *Casuarina equisetifolia* in the Seychelles, I. **129**, **474.**
Lecanium hemisphaericum (see *Saissetia*).
Lecanium hesperidum (see *Coccus*).
Lecanium juglandis (see *Eulecanium*).
Lecanium lauri (see *Pseudococcus laurinus*).
Lecanium longulum (see *Coccus*).
Lecanium magnoliarum (see *Eulecanium*).
Lecanium mali, on apples in Russia, II. **43.**
Lecanium nigrofasciatum (see *Eulecanium*).
Lecanium nigrum (see *Saissetia*).
Lecanium oleae (see *Saissetia*).
Lecanium opimum, associated with *Oecophylla smaragdina* in Java, I. **150.**
Lecanium persicae (see *Eulecanium*).
Lecanium prunastri (see *Eulecanium*).
Lecanium pseudexpansum, sp. n., on *Pandanus odoratissimus* in Australia, III. **167.**
Lecanium pseudomagnoliarum (see *Eulecanium*).
Lecanium psidii (see *Pulvinaria*).
Lecanium punctuliferum var. *lamborni*, in Nigeria, II. **203.**
Lecanium pyri (see *Eulecanium*).
Lecanium quercifex (see *Eulecanium*).
Lecanium resinatum, in Chile, I. **138.**
Lecanium ribis (see *Eulecanium*).
Lecanium robiniarum (see *Eulecanium*).
Lecanium tessellatum (see *Eucalymnatus tessellatus*).
Lecanium viride (see *Coccus viridis*).
lecontei, Lophyrus (*Diprion*).
lectularis, Oxycarenus.
leda, Melanitis.
Leeks, pests of, in Holland, I. **386**; pests of, in Russia, III. **104.**
leeuweni, Alcides.
lefroyi, Rhogas.
Legislation, for use of arsenicals in agriculture in France, II. **125**; against use of arsenicals in agriculture, II. **364**; regarding insecticides in U.S.A., II. **559**, **562**; (see also Plant Pests).
leguminicola, Perrisia (*Cecidomyia*, *Dasyneura*).
leguminosae, Aphis.
Leineweber's Compound, against *Enarmonia wōberiana*, III. **742.**
Leis, *Ceroplastes rubens* intercepted on, in California, III. **558.**

Leistes guianensis, destroying *Mocis repanda* in Br. Guiana, II. 520.
Leistes militaris, damaging rice in Trinidad, II. 575.
Lema, on cereals in Russia, II. 648, III. 610.
Lema cyanella, on oats in France, III. 428; on grain crops in Russia, I. 487, II. 172.
Lema duodecimpunctata (see *Crioceris*).
Lema melanopa, on oats in France, III. 428; on barley and oats in Hungary, II. 309; bionomics and control of, on grain crops in Russia, I. 357, 460, 479, 487, 493, II. 34, 43, 171, 202, 716, III. 46, 67, 112, 226, 339, 397, 402, 443, 480, 481, 543.
lemolea, Spalgis.
Lemon (*Citrus medica limon*), *Aleurodes citri* on, in Argentina, III. 694; Coccidae on, in Asia Minor, II. 189; pests of, in Brazil, II. 174, 207; scale-insects imported into California on, from Mexico, III. 420; control of pests of, in Egypt, III. 173; control of *Ceratitis capitata* on, in Hawaii, III. 567; pests of, and their control in the Mediterranean Region, I. 297, II. 149, 397, III. 143, 431; Coccidae on, in the Seychelles, I. 129; pests of, in Russia, II. 51, III. 223; *Ceratitis capitata* bred from, in Uganda, II. 59; pests of, in U.S.A., I. 325; II. 247, 347, 435, 436, III. 275, 494, 688; effects of fumigation on, I. 502, II. 149; effects of lime-sulphur on, II. 113; (see Citrus).
Lemon, Rough Skin (*Citrus medica* var.), said to be immune to *Ceratitis capitata* in Hawaii, I. 511.
Lemon Grass, *Sipha flava* on, in Porto Rico, III. 674.
Lemoncillo, *Selenaspidus articulatus* intercepted on, from Ecuador, III. 455.
lemur, Baccha.
Lentils (*Ervum*), *Laphygma exigua* on, in India, II. 248; not attacked by *Oria musculosa* in Russia, II. 319; pests of, in Russia, II. 262, 648, III. 51, 106; list of pests of, I. 123.
lentis, Bruchus.
leontodontis, Tephritis (*Trypeta*).
Leonurus cardiaca (Mother-wort), *Eurydema oleracea* on, in Russia, III. 7.
Leopard Moth (see *Zeuzera*).
lepida, Parasa.
lepidii, Baris (*Baridius*).
lepidior, Tomaspis.
Lepidiota albohirta, bionomics of, on sugar-cane in Australia, III. 409, 490, 751.
Lepidiota darwini, on *Eucalyptus* in Queensland, III. 491.
Lepidiota frenchi, in Queensland, III. 490.
Lepidiota pinguis, on camphor in Ceylon, II. 597.
Lepidiota rothei, experiments with *Metarrhizium anisopliae* and, in Queensland, III. 409.
Lepidium draba, Psalidium maxillosum on, in Russia, I. 478.
Lepidium perfoliatum, Acyrthosiphon gossypii paczoskii on, in Russia, III. 702.
Lepidosaphes (*Mytilaspis*) (Mussel Scale), control of, in orchards in Australia, III. 158, 409; intercepted in California on lemons from Mexico, III. 420; in Dominica, I. 77; controlled by *Epilachna similis* in East Africa, I. 247; sprays for, in New Zealand, II. 603.
Lepidosaphes ambigua, on *Mesua ferrea* in Ceylon, III. 168.
Lepidosaphes auriculata, on croton in Australia, II. 652; in the Seychelles, II. 567.
Lepidosaphes beckii (*Mytilaspis citricola*) (Orange Mussel Scale, Purple Scale), on citrus in Argentina, II. 207, 480; on crotons and citrus in Australia, II. 652, III. 167; declared a pest in Br. Columbia, I. 48; on citrus, etc., in Br. Guiana, II. 417; intercepted in California on citrus, III. 420, 494, 558, 625, 690, 739; on citrus in California, III. 22, 444, 622, 689; on citrus in Ceylon, II. 652; in Chile, I. 138, 350; on citrus in East Africa, I. 49, 258, 415, II. 571; and its control on citrus in Italy, I. 278, 380, II. 609, III. 143; on orange in Peru, III. 135; on mandarin oranges in Paraguay, III. 705; in South Africa, II. 299, III. 502; on citrus in Spain, I. 99, 278, 297, III. 143; on citrus in the West Indies, I. 83, 188, 251, 329, II. 78, 87, 88, 143, 698, III. 412, 650; on citrus in Zanzibar, III. 125; natural enemies of, I. 350, 427, II. 129.
Lepidosaphes ceratoniae, on carob in Greece, I. 167.
Lepidosaphes crawii, intercepted in California, III. 526.

Lepidosaphes (*Coccomytilus*) *dispar*, sp. n., on cassava in Madagascar, II. 92, 425.
Lepidosaphes erythrinae, sp. n., on *Erythrina* in Ceylon, III. 168.
Lepidosaphes eucalypti, on *Eucalyptus piperita* in Australia, II. 652.
Lepidosaphes ficifolii, in Chile, I. 138.
Lepidosaphes fiorii, sp. n., on *Rhus astechezan* in Eritrea, II. 346.
Lepidosaphes flava, on olive trees in Tunisia, I. 167.
Lepidosaphes gloveri (Long Scale), intercepted in California on citrus, III. 420, 494, 558, 626, 690, 739; on croton, etc., in Ceylon, II. 644, III. 83; on fruit in Japan, I. 520; on oranges in New South Wales and U.S.A., II. 705; on citrus in Spain, I. 278, 297, III. 143; fungi infesting, in U.S.A., II. 129.
Lepidosaphes lasianthi, on citrus in India, I. 279; on camellia in U.S.A., I. 101.
Lepidosaphes lobulatus, on *Casuarina* in Australia, II. 705.
Lepidosaphes marginalis, sp. n., in Africa, II. 354.
Lepidosaphes mulgae, sp. n., on *Mulga* in Australia, II. 705.
Lepidosaphes newsteadi, intercepted on umbrella pine in California, III. 626.
Lepidosaphes olivina, sp. n., on olives in Eritrea, II. 346.
Lepidosaphes pallida, on *Citrus acida* in Australia, III. 167.
Lepidosaphes pinnaeformis, on citrus in Russia, III. 223.
Lepidosaphes pyriformis (*Pinnaspis nitidus*), food-plants of, in New Zealand, III. 721.
Lepidosaphes spinosa, on *Melaleuca* in Australia, III. 80.
Lepidosaphes ulmi (*Mytilaspis pomorum*) (Mussel Scale, Oystershell Scale), on apple, etc., in Australia, II. 584, 705, III. 491, 527; on apple and gooseberry in Britain, I. 533, II. 563, III. 346, 675, 715, 724; parasites of, in Britain, III. 675, 724; declared a pest in Br. Columbia, I. 48, 85; bionomics and control of, in Canada, I. 400, 401, 403, II. 22, 94, 217, 218, 512, 675, 677, III. 69, 552; in Chile, I. 138; on apples, etc., in France, II. 166, III. 10, 11; on fruit trees in Germany, II. 500; effect of low temperature on eggs of, in Iowa, III. 572; on willow in Italy, III. 124; distribution of, I. 167; on fruit in Japan, I. 520; control of, in New Zealand, II. 603; in Norway, III. 107; on fruit trees in Russia, I. 358, 363, 460, II. 35, 515, 700, 715, III. 41, 45, 81, 204, 214, 215, 224, 226, 393, 396, 399, 441, 543, 601, 606, 610; not indigenous in S. Africa, II. 300; bionomics and control of, in U.S.A., I. 54, 133, 140, 280, 413, 475, II. 3, 216-218, 536, III. 141, 161, 182, 192, 415, 515, 533, 572, 708, 709; intercepted in U.S.A., II. 186, III. 117, 275, 469, 494, 513, 558; measures against, I. 475, II. 3, 22, 218, 536, 561, 563, 603, III. 182, 215, 396, 442, 676, 708; parasitised by *Leucopis nigricornis*, I. 392.
Lepidosaphes vandae, sp. n., on *Vanda spathulata* in Ceylon, III. 755.
lepidus, *Anthrenus*.
Lepisma saccharina (Silver Fish), bionomics of, in India, III. 714; bionomics and control of, in U.S.A., III. 587.
leprosa, *Inesida*.
Leptadenia, planted to protect the natural enemies of Aphids in the French Sudan, II. 396, 588, 631.
leptadeniae, *Macrosiphum* (*Siphonophora*).
Leptinotarsa decemlineata (Colorado Potato Beetle), unknown in Australia, II. 117; on potatoes in Brazil, II. 173; bionomics and control of, in Canada and U.S.A., I. 15, 180, 302, 404, 405, 407, 412, 413, 476, II. 203, 253, 537, 560, 585, 665, III. 89, 179, 272, 328, 372, 469, 472, 507, 547, 552; on potatoes in Germany, II. 711, III. 712.
Leptis, II. 572.
Leptispa pygmaea, bionomics of, on rice in India, II. 67.
Leptobyrsa explanata (Rhododendron Lace Bug), bionomics of, in U.S.A., III. 193, 515, 685.
Leptocentrus substitutus, on indigo in Ceylon, I. 89; bionomics of, on *Crotalaria* in Ceylon, III. 83.
Leptocoris trivittatus, in Saskatchewan, III. 507.
Leptocorisa (Rice Bug), on rice in India, I. 344.
Leptocorisa acuta, on rice in the Far East, II. 489.

Leptocorisa varicornis (Rice Bug), on rice, etc., in the Far East, II. 489, 490; on rice in India, II. 69, 139.
Leptodera dentata, attacking *Anisoplia austriaca* in Russia, II. 260.
Leptodictya tabida, on sugar-cane in Mexico, I. 184.
Leptoglossus australis, on cotton in the Bismarck Archipelago, I. 349.
Leptoglossus membranaceus, on cotton in Africa, I. 49, II. 2, 592, III. 752; on fruit and vegetables in Ceylon, I. 89.
Leptoglossus phyllopus, on tomato in Florida, III. 179.
Leptoglossus zonatus, on fruit in Arizona, I. 180.
Leptohylemyia coarctata (see *Hylemyia*).
Leptomastix, parasite of *Pseudococcus citri* in Sicily, established in California, III. 121, 349, 493, 494, 557, 690.
Leptomastix dactylopii, parasite of *Pseudococcus citri* in Br. Guiana, II. 520.
Leptomastix superbus, sp. n., parasite of *Pseudococcus* in Eritrea, III. 433.
Leptops, on apples in Australia, III. 527.
Leptops hopei, on fruit trees in Australia, III. 491.
Leptopternis clausi (see *Hyalorhipis*).
Leptosonyx silphoides, food-plants of, in Astrachan, II. 53.
Leptosonyx typhoides, on lucerne, etc., in Astrachan, II. 262.
Leptospermum, *Asterolecanium stypheliae* on, in Australia, III. 750; *Hyalarcta hübneri* on, in Australia, II. 493; *Chrysomphalus rossi* on, in South Africa, II. 300.
Leptostylus praemorsus (Lime Bark Borer), on limes in the West Indies, I. 163, 252, 257, II. 88.
Leptothrips asperus macro-ocellatus, on oranges in Florida, I. 149.
Leptothrips floridensis, on citrus in in Florida, III. 326.
Leptothyrea, in S. Rhodesia, III. 174.
Leptoxyda (see *Dacus*).
Leptura canadensis, in Maine, I. 143.
Lepturges querci, on *Wistaria chinensis* in Iowa, III. 495.
lepturoides, *Omophlus*.
Leptus autumnalis (see *Trombidium pusillum*).
Lepyrus capucinus, in Russia, II. 482.
Lepyrus palustris, on basket willows in Russia, III. 222.
Lersia oryzoides, *Tetraneura graminis* on, in Colorado, III. 351.
Lesser Apple Leaf-folder (see *Teras minuta*).
Lesser Apple Worm (see *Enarmonia prunivora*).
Lesser Bud Moth (see *Recurvaria nanella*).
Lesser Peach Borer (see *Aegeria pictipes*).
Lesser Wax Moth (see *Achroia grisella*).
Lestodiplosis, preying on Aphids and Coccids, III. 134.
Lestophonus, II. 307; probably of value for controlling *Icerya purchasi*, III. 348.
lethifera, *Blaps*.
Lethrus, in Russia, III. 606.
Lethrus apterus, bionomics of, on fruit and crops in Russia, I. 486, 492, 527, II. 34, 42, 110, 395, III. 226, 342, 393, 402, 443, 485, 540, 601.
Lethrus cephalotes, on linseed and vines in Russia, II. 44, 366, 608, 627, III. 477, 478.
Lettuce (*Lactuca*), pests of, in Austria, II. 429; pests of, in Britain, I. 434, II. 598, 656; *Agriotes segetis* on, in Cuba, III. 525; *Rhopalosiphum lactucellum* on, in Egypt, III. 749; pests of, in France, I. 504; pests of, in Italy, III. 124; pests of, in the Philippines, I. 314; *Phytometra orichalcea* on, in Rhodesia, III. 361; *Blaniulus guttulatus* on, in Sweden, III. 107; pests of, in U.S.A., I. 324, II. 116, 510, III. 89, 269.
Lettuce Aphis (see *Rhopalosiphum lactucae*).
Lettuce Root Aphis (see *Pemphigus lactucarius*).
Leucaena glauca, *Aspidiotus lataniae* on, in Ceylon, III. 83; pests of, in Java, III. 314, 648, 713.
Leucania, on potatoes in Australia, II. 118.
Leucania pallens, trapped with molasses in Russia, III. 639; on Jerusalem artichoke, III. 33.
Leucania unipuncta (see *Cirphis*).
leucaniae, *Ichneumon*; *Phorocera*.
Leucanthemum vulgare, *Aegeria tipuliformis* on, in France, I. 274.
Leucaspis bambusae, intercepted in California on bamboo from Japan, III. 420; on bamboo in New Jersey, III. 589.
Leucaspis cordylinidis, on *Cordyline acaciae* in Australia, III. 80.
Leucaspis gigas (*Fiorinia morrisi*), food-plants of, in New Zealand, III. 721.

Leucaspis indica, intercepted on mangos inported from Java, II. **460.**
Leucaspis japonica, on maple and privet in U.S.A., III. **357.**
Leucaspis kelloggi, parasitised by *Physcus kelloggi* in U.S.A., II. **495.**
Leucaspis limoniae, sp. n., on *Limonia alata* in Ceylon, III. **755.**
Leucaspis (*Fiorinia*) *maskelli*, sp. n., in New Zealand, III. **721.**
Leucaspis perezi, on *Pinus* spp. in the Canary Islands, III. **345.**
Leucaspis riccae, on olives in Egypt, I. **258.**
Leucaspis salicis, on *Salix* in Baluchistan, III. **345.**
leucatella, *Recurvaria.*
Leucinodes orbonalis, on egg-plant in East Africa, I. **415.**
Leucocelis, in S. Rhodesia, III. **174.**
Leucocelis funesta (see *Oxythyrea*).
Leucochrysa, in South America, I. **229.**
leucochrysella, *Coleophora.*
leucogyna, *Heteronygmia.*
Leucohimatium langi, associated with fungi in Russia, III. **544.**
Leucoma, parasitised by *Trichogramma fasciatum* in Russia, II. **335.**
Leucoma salicis (see *Stilpnotia*).
leuconotus, *Anthores.*
Leucophlebia lineata, on sugar-cane in Java, I. **169**; on sugar-cane in the Far East, II. **490.**
Leucopis, parasites of, in Eritrea, III. **432**; predaceous on Aphids on cotton in Turkestan, II. **312**; predaceous on Aphids in French Sudan, II. **396, 631**; predaceous on *Monellia caryae* in U.S.A., III. **142.**
Leucopis argentata, predaceous on *Brachycolus noxius* in Russia, III. **308**; parasitised by *Xana nigra*, sp. n., III. **308.**
Leucopis bella, predaceous on *Pseudococcus yerbasantae* in California, I. **307**, II. **436, 437.**
Leucopis flavicornis, sp. n., bred from *Pemphigus fraxinifolii* in U.S.A., III. **90.**
Leucopis griseola, predaceous on Aphids in Montana, II. **536.**
Leucopis nigricornis, predaceous on Aphids and Coccids, I. **392.**
Leucoptera (*Cemiostoma*), on coffee in East Africa, II. **570.**
Leucoptera coffeella (Coffee Leaf-miner), in Br. Guiana, III. **591**; on coffee in East Africa, I. **105, 414**; parasites of, in the West Indies, I. **389**, II. **216**, III. **517**; on coffee in Réunion, II. **215.**
Leucoptera laburnella, bionomics of, in England, III. **718**; on laburnum in Holland, III. **741.**
Leucoptera (*Cemiostoma*) *scitella*, on fruit trees in France, III. **496**; on fruit trees in Holland, I. **386**; on pears in Russia, III. **610.**
leucoptera, *Blissus.*
Leucosomus opthalmicus (see *L. pedestris*).
Leucosomus pedestris, II. **178.**
leucospila, *Mordella.*
leucostigma, *Hemerocampa.*
Leucostoma atra, parasite of *Reduviolus roseipennis*, III. **248.**
Leucotermes flaviceps, destroying buildings in Formosa, II. **190.**
Leucotermes flavipes, bionomics of, in timber in U.S.A., III. **378.**
Leucotermes indicola, destroying timber in Bombay, I. **525.**
Leucotermes (*Termes*) *lucifugus*, on pine-stumps in France, II. **657**; on vines in Italy, III. **113**; on vines in Russia, III. **42.**
Leucotermes tenuis, on sugar-cane in the West Indies, II. **284.**
Leucotermes virginicus, on timber in U.S.A., III. **378.**
Leucothyreus, on cacao and cotton in the West Indies, I. **254.**
leucotreta, *Argyroploce.*
leucotrochus, *Pteronus.*
levana, *Vanessa.*
Levuana iridescens, on coconut in Fiji, II. **150, 691**; not found in Samoa, II. **7**; on coconut in the South Sea Islands, II. **3.**
libatrix, *Scoliopteryx.*
Libellula quadrimaculata, migration of, in Russia, III. **51, 105.**
libelluloides, *Palpares.*
Liberian Coffee, scale-insects on, in the Seychelles, II. **567**; (see Coffee).
libocedri, *Syntexis.*
Libocedrus, *Hylotrupes amethystinus* on, in U.S.A., III. **546.**
Libocedrus decurrens (Incense Cedar), *Pseudococcus andersoni* on, in California, II. **435**; *Syntexis libocedri*, sp. n., on, in U.S.A., III. **690.**
lichatschovi, *Bulaea.*
Lichen, iron sulphate for destroying, II. **515**; removed from trees by *Limax arborum*, II. **572.**
lichenoides, *Drosicha.*
Lichi (see *Nephelium litchi*).
Lichtensia hakearum, on *Hakea ilicifolia* in Australia, III. **750.**
lichtensteini, *Pemphigus.*
licus, *Castnia.*
lienardi, *Achaea.*
ligata, *Pentatoma.*

Light Trap, description of, II. 663.
lignicola, Cynips.
Lignum quassi rospatum, decoction of, not effective as an insecticide, III. 604.
Lignum quassi surinamensis, decoction of, for pests of cherries, III. 604.
ligulella, Dichomeris.
ligustici, Otiorrhynchus.
ligustri, Sphinx.
ligustriella, Aphis.
Ligustrum ibota (Chinese Privet), *Aulacaspis pentagona* on, in Connecticut, II. 184.
Ligustrum vulgare (see Privet).
Ligyrus ebenus, on sugar-cane in Br. Guiana, I. 130; on cacao in the West Indies, III. 663.
Ligyrus gibbosus, in U.S.A., II. 121, 244.
Ligyrus relictus, in U.S.A., II. 121.
Ligyrus rugiceps, bionomics and control of, in U.S.A., I. 225, 253, III. 581.
Ligyrus tumulosus, bionomics of, on sugar-cane in the West Indies, I. 253, 254, II. 49, 532.
Lilac (*Syringa*), pests of, in England, III. 718; pests of, in Russia, II. 261, III. 220, 224, 225, 543, 610; pests of, in U.S.A., I. 101, 225, III. 43, 515.
Lilac, Mountain, *Vanessa californica* on, in U.S.A., I. 177.
Lilac Borer (see *Podosesia syringae*).
lilifolia, Tylopsis (see *T. thymifolia*).
Lily, *Brithys crini* on, in Ceylon, III. 157; *Merodon equestris* on, in England, II. 88; *Crioceris merdigera* on, in Italy, II. 632; *Apocellus sphaericollis* on, in U.S.A., III. 550; *Brithys pancrati* on, in Zanzibar, III. 125.
Lily, Easter, *Rhizoglyphus hyacinthi* on, in Ontario, II. 491.
Lily Beetle (see *Crioceris merdigera*).
Lima Bean (*Phaseolus lunatus*), *Cryptorrhynchus* on, in Barbados, III. 625; *Limonius californicus* on, in California, II. 303; pests of, in Guam, III. 374.
limacina, Eriocampoides.
Limax arborum, clearing trees of lichen, II. 571.
limbativentris, Tibraca.
Lime (*Citrus medica acida*), scale-insects on, in Australia, III. 167; pests of, in Br. Guiana, I. 130, 343; *Ceroputo yuccae* on, in California, II. 436; *Aphis tavaresi* on, in East Africa, III. 749; *Ceratitis capitata* on, in Hawaii, I. 374; pests of, in Italy, I. 320, II. 268; *Anastrepha* (*Trypeta*) *ludens* on, in Mexico, II. 77; pests of, intercepted in U.S.A., III. 420, 494, 558, 625, 690, 739; pests of, in the West Indies, I. 76, 83, 163, 251, 252, 257, 329, II. 87, 88, 143, 602, 603, 693, III. 301; (see Citrus).
Lime Tree Bark-borer (see *Leptostylus praemorsus*).
Lime Twig Borer (see *Elaphidion mite*)
Lime (*Tilia*), pests of, in Britain, II. 499, 598, 655, III. 501, 633, 754; *Haplocnemia curculionoides* on, in France, III. 11; pests of, in Russia, I. 318, II. 11, 640, III. 7, 46, 130, 226, 438, 535, 603; spinning mites on, in Sweden, III. 253; pests of, in U.S.A., I. 141, 280, II. 185, 188, 390, 600, III. 372, 418, 668, 673; *Aspidiotus perniciosus* on, I. 472.
Lime, effect of, on heavy soils, I. 505; from magnesian limestone, useless for lime-sulphur, II. 561; in Bordeaux mixture, II. 71, 110; an ingredient of Laycotin, II. 681; an ingredient of Conchylin, I. 337, 356; method of testing amount of impurity in, II. 71; purity of, in lime-sulphur mixture, II. 97; with salt and sulphur, III. 173, 278, 284; and carbolic acid, I. 498, II. 35, 161, 381; and carbolineum, II. 176, 199, 428; and copper sulphate, III. 30, 547; and iron sulphate, I. 271, 496, II. 51, 634, III. 67, 206, 482; and kerosene against Aphids and Coccids, I. 255, II. 77, 488, 498, 701; and lead arsenate, I. 384, 425, 475, II. 458, 460, III. 179, 180; and Paris green, I. 212, 301, 361, 366, 367, 440, 459, 484, 543, II. 3, 19, 36, 53, 54, 142, 162, 223, 249, 262, 366, 371, 373, 374, 533, 614, 626, 641, 642, 647, 669, 700, 717, III. 179, 603, 611; and pyrethrum against *Chortophila brassicae*, II. 285; and sodium arsenate against *Colaspidema atrum*, II. 695; and soap against *Psylla*, III. 214; and turpentine, II. 645; as a winter wash, III. 286; formula for wash containing, against ants, III. 365; against Tipulid larvae, III. 54; as a dusting powder, I. 140, II. 151, 297, 355, 459, 514, 551, 587, III. 12, 19, 78, 86, 125, 159, 179, 188, 199, 212, 218, 288, 301, 407, 543, 564.

Lime Arsenate (see Calcium Arsenate).
Lime Arsenite (see Calcium Arsenite).
Lime-copper-sulphate, in nicotine soap, II. 240.
Lime, Milk of, with Paris green, II. 53; in Bordeaux mixture, II. 550, 681; against orchard pests, I. 315, II. 77, 501, III. 396, 485, 728; against vine pests, II. 445; against *Chortophila brassicae* and *Hylemyia antiqua*, II. 266, III. 189; against *Byctiscus betulae*, III. 130; against wood-borers, III. 198, 394; against *Chionaspis tegalensis*, III. 319; against *Rhynchites pauxillus*, III. 533.
Lime-sulphur, preparation of, and formulae for, I. 219, 265, 470, II. 72, 165, 207, 210, 230, 292, 322, 388, 412, 413, 438, 454, 455, 459, 477, 688, 689, 705, III. 96, 179, 191, 396, 417, 418, 472, 529, 619, 678, 694, 736, 746; effects of, as an insecticide, I. 64, 176, 474, 475, II. 21, 71, 297, 298, 378, 379, 545, 546, 563, 581, III. 135, 514, 692, 736; chemistry of, I. 455, 456, II. 97, 543, 544, 545, 546, III. 366, 418, 448, 678; cost of, I. 470, 474, II. 21, 296, 388, 413, 477, 561, 582, 689, III. 418, 514, 678; effects of spraying with, on plants, I. 455, 456, II. 113, 245, III. 736; unreliability of brands of, II. 589; means of ascertaining specific gravity of, III. 367, 736; result of mixing with other insecticides, III. 734, 737; addition of extract of *Saponaria officinalis* to, III. 692; barium-sulphur compared with, III. 448, 707; and carbolic acid, II. 23; and Blackleaf 40, I. 264, 405, 512, II. 22, 116, 380, 386, 512, 554, III. 407; and flour paste, I. 240, 269, 325, 353, II. 82, 83, 247; and lead arsenate, I. 127, II. 190, 389, 458, 512, 562, 709, III. 179, 301, 413, 472, 529, 654; against orchard pests, I. 127, 128, 283, 291, 404, 475, II. 23, 301, 344, 358, 359, 387, 388, 457, 458, 581, 582, 673, 689, 697, III. 23, 59, 141, 142, 179, 180, 192, 250, 274, 328, 346, 362, 413, 414, 415, 419, 445, 464, 472, 473, 508, 513, 529, 586, 685, 694, 719; against scale-insects, I. 133, 136, 265, 283, 405, II. 86, 97, 119, 163, 165, 207, 209, 217, 218, 296, 298, 378, 433, 455, 458, 512, 545, 562, 563, 585, 609, 673, III. 25, 95, 144, 182, 328, 362, 372, 409, 417, 464, 518, 554, 618, 763; against spider mites, I. 240, 269, 325, 353, 469, II. 82, 83, 247, 482, 701, 709, 715, III. 95, 178, 254, 261, 306, 335, 362, 367, 408, 444, 471, 489, 557, 622, 632, 651; against vine pests, III. 212; against *Coleophora laricella*, I. 64, III. 191; not popular in Hungary, II. 310.
Lime-sulphur-soda-salt (Theobald's formula), against *Eriosoma lanigerum*, II. 498, III. 96.
liminaris, Phloeotribus.
limitaris, Perilissus.
Limneria (see *Limnerium*).
Limnerium, parasite of Lepidoptera in U.S.A., I. 87, 426, II. 343, III. 153.
Limnerium albidum, parasite of *Evergestis extimalis* in Russia, II. 357.
Limnerium blackburni, parasite of Lepidoptera in Hawaii, II. 629. III. 363, 682.
Limnerium disparis, parasite of gipsy moth in U.S.A., III. 330.
Limnerium (*Limneria*) *gracile*, parasite of *Plutella maculipennis* in England, III. 746.
Limnerium interruptum, parasite of *Gelechia gossypiella* in Egypt, II. 596.
Limnerium polynesiale, parasite of *Plutella maculipennis* in Hawaii, III. 682; parasite of *Phthorimaea operculella*, II. 280.
Limnerium tibiale (see *Angitia*).
Limonia alata, scale-insects on, in Ceylon, III. 725, 755.
limoniae, Leucaspis.
Limonius aeruginosus, on field crops in Russia, III. 309.
Limonius californicus (Sugar-beet Wireworm), bionomics and control of, in California, II. 303, III. 299, 625.
Limonius canis, in Okanagan, II. 676.
Limonius confusus (Confused Wireworm), in U.S.A., III. 299.
Limonius discoideus, in orchards in Canada and U.S.A., I. 413, II. 676, III. 272, 298.
Limonius infuscatus (see *L. pilosus*).
Limonius minutus, on fruit trees in Russia, III. 223.
Limonius pilosus, in Br. Columbia, II. 676; on beet in Russia, I. 485.
Limonius venablesi, in Br. Columbia, II. 676.
limonus, Aphelinus.
limosipenella, Coleophora.

Limothrips (*Thrips*) *cerealium*, predaceous on *Brachycolus noxius* in Russia, III. 308; on oats in France, III. 428.
Limothrips denticornis, on rye in Denmark, III. 698; on tobacco and cereal crops in Russia, II. 33, 170, 267, III. 220, 401, 481.
Limpet Caterpillar (see *Acanthopsyche reidi*).
Lina (see *Melasoma*).
Linaria vulgaris (Toad-flax), *Phthorimaea operculella* on, in France, II. 401; *Feltia exclamationis* and *Euxoa segetum* on, in Russia, II. 212.
linariata, Eupithecia.
linda, Tenthredo (see *Ardis bipunctata*).
Linden (see Lime, *Tilia*).
Linden Moth, destroyed by sparrows in U.S.A., III. 559.
lindheimeri, Opuntia.
lindingeri, Promecotheca.
Lindorus lophantae (see *Rhizobius*).
linearis, Atomaria; *Hypophloeus*; *Lyctus*; *Oberea.*
lineata, Agrotis; *Celerio* (*Deilephila*); *Leucophlebia*; *Sarcophaga.*
lineatella, Anarsia.
lineatum, Graphosoma; *Trypodendron.*
lineatus, Agriotes; *Poecilocapsus*; *Sitones* (*Sitona*); *Stenobothrus.*
Lined Corn Borer (see *Oligia fractilinea*).
lineellus, Sitones.
lineigera, Astyage.
lineola, Galerucella; *Sphodromantis*; *Tectocoris.*
lineolata, Blitopertha; *Cremastogaster*; *Diatraea.*
lineolatus, Adelphocoris (*Capsus*).
lini, Aulax.
Linnaemyia, in Canada, I. 114.
Linnaemyia fulvicauda, parasite of *Mocis repanda* in Porto Rico, II. 134, 495.
Linseed, pests of, in Russia, I. 460, II. 34, 44, 340, 648, III. 47, 479, 635; indigo sown with, not attacked by *Psylla isitis*, II. 687.
Linseed Oil, against boring-beetles, III. 330; with lead and zinc against *Eriosoma lanigerum*, I. 274, 433, II. 293, 604, III. 609; and arsenic against termites, III. 174; emulsion of, formula for making, I. 363, II. 561, 562.
lintneri, Chionaspis; *Tyroglyphus.*
Lintner's Scale (see *Chionaspis lintneri*).
Linum (see Flax).
Linyphia phrygiana destroying *Tortrix fumiferana* in U.S.A., I. 202.
Liocoris tripustulatus, on currants and gooseberries in Russia, III. 45.
Lioderma quatuordentatum, parasite of *Diatraea* spp. in Br. Guiana, I. 521, III. 383.
Liodontomerus perplexus, gen. et sp. n., on lucerne infested with *Bruchophagus funebris* in Arizona, III. 151.
Liopus nebulosus, on walnut in Russia, III. 206.
Liothrips montanus (Currant Thrips), on currants and gooseberries in U.S.A., I. 515, II. 380, III. 335.
Liothula (*Oeceticus*) *omnivora*, parasitised by *Phorocera nefaria* in New Zealand, III. 722.
Liparetrus atriceps, in Queensland, III. 491.
Liparis monacha (see *Lymantria*).
Liparus coronatus, on sugar-beet in Russia, III. 542.
Lipoptycha aeratana, in Britain, III. 277.
Lipura armata, on carnations in Ireland, II. 656.
Liquorice, *Lasioderma serricorne* breeding in, I. 170.
Liriodendron (see Tulip Tree).
liriodendri, Toumeyella.
Lissonota culiciformis, parasite of *Eucosma ocellana* in Europe, III. 584.
Lissorhoptrus simplex (Rice Water Weevil), bionomics of, in U.S.A., I. 151, III. 131.
Listronotus latiusculus (Parsley-stalk Weevil), in Connecticut, II. 184.
Lita solanella (see *Phthorimaea operculella*).
Lithocolletis, parasitised by *Paraleurocerus bicoloripes* in Massachusetts, III. 724; on oaks in Norway, III. 435; (see *Phyllorycter*).
lithospermi, Aphis.
Lithospermum pilosum, Aphis lithospermi, sp. n., on, in Oregon, III. 588.
Lithurgus albofimbriatus, boring in *Acacia koa* in Hawaii, III. 682.
Litomastix (*Copidosoma*) *truncatellus*, parasite of *Depressaria apicella* (*nervosa*) in Germany, I. 515; parasite of *Phytometra gamma*, I. 16, II. 356, III. 542; mode of parasitism of, II. 599.
littoralis, Prodenia (see *P. litura*).
Litsea longifolia, Coccus litseae on, in Ceylon, III. 755.

Litsea zeylanica, *Heliothrips* on, in Ceylon, III. 157.
litseae, *Coccus*; *Trioza*.
Little Grass Bill Bug (see *Sphenophorus parvulus*).
Little Peach and Pear Blight, legislation against in Ontario, III. 71.
litura, *Prodenia*.
liturata, *Semiothisa* (*Macaria*).
lituratus, *Piezodorus*.
Litus nigriceps, sp. n., parasite of Homopteron in Holland, III. 644.
Live Oak (see *Quercus agrifolia* and *Q. chrysolepis*).
Livia maculipennis, on *Pinus virginiana* in Washington, III. 567.
Livia vernalis, on pines in Washington, III. 567.
livia, *Virachola* (*Deudorix*).
livida, *Campylomma*; *Chrysocharis*; *Crioceris*; *Sessinia*.
lividigaster, *Platyomus*.
lividus, *Monocrepidius*.
Livistona, rhinoceros beetle on, in Seychelles, II. 568.
Livistona chinensis, *Oryctes rhinoceros* on, in Straits Settlements, II. 99.
Lixus, destroyed by rooks in Russia, III. 342; on beet in Western Europe and Russia, II. 468.
Lixus ascanii, on beet in France, II. 90; on beet, etc., in Russia, II. 465, 468, III. 93.
Lixus ascanii var. *albomarginatus*, on mustard in Russia, I. 537, II. 355, 357, 468, III. 222, 638.
Lixus ascanii var. *circumdatus*, not present in Russia, II. 468.
Lixus ascanii var. *sicanus*, in Caucasia, II. 468.
Lixus ascanii var. *wagneri*, in Caucasia, II. 468.
Lixus auritus, on *Hevea* in the Belgian Congo, III. 649.
Lixus bicolor, on mustard in Astrachan, III. 638.
Lixus cardui, in Russia, II. 468.
Lixus cardui var. *cynarophilus*, in Russia, II. 468.
Lixus concavus (Rhubarb Curculio), on dock in U.S.A., I. 37, III. 709.
Lixus elongatus var. *rufitarsis*, on beet in Tunis, II. 451.
Lixus junci, on beet in France, II. 90; in Russia, II. 468.
Lixus lateralis (see *L. lauferi*).
Lixus lauferi, in Hungary, II. 468.
Lixus scabricollis, on beet in France, II. 89, 420, 451; not present in Russia, II. 468; parasites of, II. 90, 426.
Lizards, destroying insects, I. 182, 185, II. 48, 62, 326, 509, 670, III. 243, 300, 680; killed by toxin in blood of *Galerucella luteola*, III. 252.
Lobelia, woodlice on, in Ontario, II. 491.
Lobelia cardinalis, *Aphelenchus ormerodis* on, in Holland, III. 740.
Lobodiplosis, preying on Coccidae, III. 134.
Lobster Cactus (*Epiphyllum*), *Pseudococcus adonidum* on, in California, II. 436.
Lobster Caterpillar (see *Stauropus alternus*).
lobulatus, *Lepidosaphes*; *Rhizococcus*.
Lochmaea (*Adimonia*) *suturalis*, on heather in Scotland, I. 387.
Locusts, control of, in Algeria, II. 24, 238, 462, 475, 594, 681, III. 40, 118, 400, 427, 523, 699; destruction of, in Argentina, III. 631; in Baluchistan, III. 461; in Brazil, I. 341, II. 194; legislation against, in Br. Guiana, III. 175; destruction of, in Colombia, III. 704; in East Africa, II. 149; control of, in Egypt and the Sudan, II. 95, III. 429; control of, in Federated Malay States, I. 217, 273, 378, II. 110, III. 112, 134, 164, 292, 293, 323, 479, 565, 606, 657, III. 361, 467, 705; in Greece, I. 409; in India, III. 755; in New Caledonia, I. 150; in Nicaragua, II. 206; in Palestine, II. 623; bionomics of, in the Philippines, I. 65-68, 470, III. 682; bionomics and destruction of, in Russia and Siberia, I. 459, 466, II. 37, 65, 73, 197, 198, 357, 473, 474, 475, 508, 509, 521, 522, 614, 648, 716, 717, 718, III. 44, 91, 98, 103, 108, 111, 229, 232, 239, 241, 242, 244, 339, 399, 437, 442, 536, 537, 603, 610, 636, 642, 699; control of, in Sicily and Italy, III. 38, 499; on coconut in the Solomon Islands, II. 691; bionomics and control of, in South Africa, I. 138, II. 155, 574, III. 503, 719; in Trinidad, III. 618, 652, 671; control of, in U.S.A., and Canada, II. 245, 491, III. 63, 300, 368, 553; destroyed by birds, I. 67, II. 126, 509, 574, III. 243, 297, 368, 720; experiments with *Coccobacillus acridiorum* and, I. 162, 197, II. 95, 126, 238, 335, 353, 461, 462, 509, 681, III. 63, 118, 399, 503,

553, 682, 699; fungi ineffective against, III. 24; poisoned baits against, II. 65, 95, III. 99, 368, 415; (see *Calliptamus, Dociostaurus, Locusta, Schistocerca*, etc.).
Locust Borer (see *Cyllene robiniae*).
Locust Tree (*Robinia pseudacacia*), pests of, in Russia, I. 461, 487, 488, III. 45, 225; pests of, in U.S.A., I. 54, 425, II. 120, 662, III. 85, 474, 515, 572, 580, 671, 673, 709; resistant to gipsy moth in U.S.A., II. 711, III. 669.
Locusta, in Malaya, III. 13; parasites and breeding places of, II. 474.
Locusta australis, parasitised by *Scelio australis* in Queensland, II. 17.
Locusta cantans (see *Phasgonura*).
Locusta danica, in the Federated Malay States, I. 217, 378, II. 134; on sugar-cane in Queensland, II. 17; bionomics of, in Russia and Siberia, I. 535, 542, II. 53, 170, 508, 716, III. 241, 242, 601; in South Africa, II. 155, III. 720.
Locusta migratoria, on sugar-cane in Réunion, II. 216; bionomics of, in Russia and Siberia, I 357, 459, 535, 542, 551, II. 38, 53, 73, 170, 202, 353, 474, 508, 614, 699, 716, III. 44, 46, 51, 67, 91, 109, 239, 241, 339, 388, 401, 437, 442, 537, 601, 603, 611, 636.
Locusta migratoroides, bionomics and control of, in the Philippines, II. 126, III. 683.
Locusta pardalina (*Pachytylus sulcicollis*), control of, in South Africa, I. 473, II. 155, 574, III. 503, 720.
Locusta sulcicollis (see *L. pardalina*).
Locusta viridissima (see *Phasgonura*).
locustarum, Trombidium (*Microtrombidium*).
loeflingiana, Tortrix.
Loelius perrisi, parasite of *Apate*, II. 196.
Loelius tibialis, parasite of *Apate*, II. 196.
loewii, Scymnus.
Loganberry, pests of, in U.S.A., I. 132, II. 439, III. 270, 419.
Lolium perenne (Rye Grass), *Hylemyia coarctata* on, in Austria, II. 475; *Oscinella frit* on, in Russia, II. 371.
Lonchaea, on cassava in Trinidad and Cuba, III. 367; infested with *Empusa ovispora*, II. 376.
Lonchaea aenea, on fruit in Brazil, III. 387.
Lonchaea aristella (Black Fig Fly) bionomics of, in Italy, III. 745.
Lonchaea chalybea, on cassava in Cuba, III. 367.
Lonchaea chorea, bionomics of, on beetroot in Britain, I. 435.
Lonchaea glaberrima, I. 97.
Lonchaea splendida, on citrus in the Mediterranean Region, III. 143.
londiniensis, Julus.
London Purple, against ants, I. 180; against cutworms, II. 381, 488; as a substitute for Paris green, III. 109; cost of, II. 566; effect of, on plants, I. 418; experiments with, against locusts, II. 565; in bait for wood-lice, II. 598; tests with, as an insecticide, III. 397, 641.
Long-beaked Clover Aphis (see *Aphis brevis*).
Long Scale (see *Lepidosaphesgloveri*).
longicauda, Agathis.
longiceps, Cardiochiles.
longiciliata, Euphyllura.
longiclava, Apterotrix.
longicollis, Odoiporus.
longicornis, Diabrotica; *Luperus*; *Prenolepis.*
longifolia, Ips (*Tomicus*); *Polygraphus.*
longimana, Labidostomis.
longimanus, Dorytomus.
longinoda, Oecophylla smaragdina.
longior, Tyroglyphus.
longipenne, Eusemion.
longipennis, Dissosteira.
longipes, Cyrtotrachelus; *Paratetranychus*; *Plagiolepis*; *Polynema.*
longiradius, Pachyneuron.
longirostris, Ischnaspis.
longispinus, Pseudococcus (see *P. adonidum*).
longistylus, Dacus (*Leptoxyda*).
Longitarsus, on *Brassica oleracea* in Russia, I. 210; on vine in Russia, I. 487.
Longitarsus pratensis, on lucerne in Europe, I. 527.
longiventris, Paragus; *Philotrypesis.*
longulus, Coccus (*Lecanium*); *Myochrous*; *Sitones.*
Lonicera (Honeysuckle), *Rhopalosiphum pastinacae* on, in Colorado, III. 351.
Lonicera tartaricum, Rhagoletis cerasi on, in Russia, III. 605.
Lonicera xylosteum, Rhagoletis cerasi on, in Russia, III. 605.
lonicerae, Rhopalosiphum.

Loosestrife (see *Lythrum salicaria*).
Lopaphus cocophaga (see *Graeffea*).
lophantae, Rhizobius (*Lindorus*).
Lophococcus carinatus, sp. n., in East Africa, II. 429.
Lophococcus glaber, sp. n., in East Africa, II. 429.
Lophococcus parvus, sp. n., in East Africa, II. 429.
Lophococcus vuilleti, on *Acacia pennata* in West Africa, II. 410.
Lophoderium pinastri, in Russia, II. 332.
Lophortyx californicus, destroying *Diabrotica duodecimpunctata* in U.S.A., I. 431.
Lophospermum erubescens (*Maurandia barclayana*), *Macrosiphum lophospermum* on, in E. Africa, II. 571.
lophospermum, Macrosiphum.
Lophyrus, parasites of, in Russia, II. 215.
Lophyrus abietis, on spruce, etc., in Canada, I. 406, 412, III. 70, 585.
Lophyrus hercyniae, on pines in Germany, I. 372.
Lophyrus lecontei, parasites of, in U.S.A., III. 658.
Lophyrus pini, on forest trees in Britain, I. 119, 464; on pines in Russia, I. 395, 493, II. 13, 332, III. 67, 106, 398, 401, 443, 606, 728; food-plants of, in U.S.A., III. 573.
Lophyrus pyri, III. 199.
Lophyrus rufus, on forest trees in Britain, I. 464; on firs in Holland, III. 199, 743; in Norway, III. 696; on pines in Russia, I. 539.
Lophyrus similis (see *L. pini*).
Lopus sulcatus, on vines in France, II. 609.
Loquat (*Eriobotrya japonica*), pests of, in Australia, II. 20, III. 158; *Ceratitis capitata* on, in Bermuda, III. 171; *Scolytus rugulosus* on, in California, III. 738; pests of, in Ceylon, II. 151, 513; *Ceratitis capitata* on, in Hawaii, I. 374; *Ceroplastes vinsoni* on, in Réunion, II. 216; fruit-flies on, in South Africa, I. 196, III. 502; *Aspidiotus perniciosus* on, in U.S.A., II. 390; attacked by termites, I. 13.
Loranthus (Mistletoe), *Cardiococcus foraminifer* on, in Australia, III. 652; associated with scale-insects in Ceylon and India, II. 583, III. 168; Psocid on, in India, III. 145; scale-insects on, in Java, I. 150; legislation against, in Zanzibar, I. 235; pests imported on, into Hawaii from California, III. 364.
Lorema accius, parasitised by *Euplectrus insuetus*, sp. n., in Florida, III. 151.
loreyi, Cirphis.
lorquini, Xylotrupes.
Lorraine, Aphids in, I. 295, II. 406; *Phylloxera* in, II. 156, 157, 586, III. 766.
loti, Acyrthosiphon; *Contarinia* (*Cecidomyia*).
Lotrionte's System, against *Dacus oleae*, II. 289, 452, 479, 577.
Lotus corniculatus, Contarinia loti and Aphids on, in Denmark, III. 247; *Bruchophagus gibbus* on, in Russia, III. 8.
Lotus Water Lily, *Rhopalosiphum* (*Siphocoryne*) *nymphaeae* on, in Egypt, III. 749.
Louisiana, II. 610; *Anthonomus grandis* on cotton in, II. 583, 650; Hymenopterous parasites in, III. 26, 151, 383; miscellaneous pests in, I. 325, II. 252, 542, III. 330, 382, 510, 573, 586, 631; sugar-cane pests and their control in, I. 103, 224, II. 658, III. 761.
lounsburyi, Dacus (*Tridacus*); *Dinaspis.*
Loxoptera dilucidana, on parsnips in France, I. 504.
Loxostege sticticalis (see *Phlyctaenodes*).
Loxura atymnus, on yams in Singapore, III. 723.
lubricipeda, Diacrisia (*Spilosoma*).
Lucanus cervus, in Russia, II. 110.
Lucerne (*Medicago sativa*), pests of, in Britain, III. 279, 747; pests of, in Canada and U.S.A., I. 40, 53, 85, 102, 177, 179, 225, 400, 425, 430, II. 45, 114, 115, 120, 245, 250, 294, 303, 361, 519, 537, 541, 599, 663, III. 18, 71, 114, 130, 139, 151, 153, 185, 267, 270, 290, 296, 299. 333, 335, 379, 380, 457, 466, 512, 516, 530, 537, 571, 576, 683, 708, 749, 763; *Tylenchus dipsaci* on, in Europe, II. 625; pests of, in France, I. 226, 411, II. 17, 203, 376, 420, 577; pests of, in India and Ceylon, I. 119, 482, III. 24, 114, 157, 749; *Sitones lineatus* on, in Germany, III. 102; pests of, in Italy, II. 181, 511, III. 53; not attacked by *Oria musculosa* in Russia, II. 392; pests of, in Russia, I. 493, 526, 527, II. 39, 43, 44, 109, 110, 248, 262, 395, 425, 465, 636, 668, 715, 716, 718, III. 8, 41, 45, 47, 91, 205, 210, 401, 402, 443, 479, 480, 481, 543, 601, 639, 703; control of pests of, in South Africa, I. 473, II. 130, 299, III. 359, 361, 756.

Lucerne Caterpillar (see *Colias electra*).
Lucerne Weevil (see *Hypera variabilis*).
lucidulus, Tryphon.
lucifuga, Cucullia; *Tetraneura.*
lucifugus, Leucotermes (*Termes*).
lucipara, Euplexia.
lucorum, Parexorista.
luctuosa, Acontia.
ludeni, Tetranychus.
ludens, Anastrepha (*Trypeta*).
Ludius, destroyed by rooks in Russia, III. 341.
Ludius hepaticus, on cruciferous plants in Florida, III. 300.
Ludius suckleyi, on apples in Br. Columbia, I. 413.
lugubrinus, Omorgus.
luigionii, Conorrhynchus.
lulella, Stenoptycha (see *Euzophera semifuneralis*).
luminosus, Pyrophorus.
lunata, Chilomenes; *Stomatorrhina* (*Idia*).
luniger, Homoporus.
lunulatus, Coccophagus; *Eumerus* (see *E. strigatus*).
Luperina (*Apamea*) *testacea*, in Denmark, III. 247.
Luperodes bivittatus, on peaches in California, III. 625.
Luperodes varicornis, on maize in U.S.A., III. 761.
Luperus flavipes, in Italy, I. 338; in orchards in Russia, III. 204.
Luperus longicornis, on fruit trees in Russia, II. 718, III. 221.
Luperus rufipes, on pears in Italy, I. 338; on fruit trees in Russia, II. 331, 718.
Lupins, *Cantharis* spp. on, in Canada, III. 507; *Chortophila funesta* on, in Denmark, III. 246; *Sitones griseus* on, in Holland, III. 742; pests of, in U.S.A., I. 243, 384, III. 287; extract of seeds of, as an insecticide, II. 349.
lupulinae, Perrisia.
lupulinus, Hepialus.
luridus, Carpophilus.
luscus, Epepeotes.
lusitanica, Malacosoma.
lutaria, Semblis.
lutea, Disophrys; *Signiphora*; *Trichogrammoidea.*
luteipes, Janus.
luteola, Galerucella; *Psylliodes.*
luteolus, Bolyphantes; *Crambus.*
luteomarginatus, Pachymerus (*Caryoborus*).
lutescens, Aphthona.
luteus, Ophion.
lutipenella, Coleophora.
luxatum, Calosoma.
Luxemburg, control of vine pests in, I. 243, 244, 331, 337, 356, 385, 542, II. 135, 239, 537, 538, 586, 631, 680, 681.
Lycaena argiades, on lucerne in Europe, I. 527.
Lycaena argyrognomon, on lucerne in Europe, I. 527.
Lycaena baetica (see *Lampides*).
Lycaena cyllarus, on lucerne in Europe, I. 527.
Lycaena dolus, on lucerne in Europe, I. 527.
Lycaena icarus, on lucerne in Europe, I. 527.
Lycaenesthes, on coffee in East Africa, I. 414.
Lycium europaeum (European Boxthorn), *Phthorimaea operculella* on, II. 401.
lycopersicella, Macrosiphum.
lycopersici, Macrosiphum.
Lycopersicum, mosaic disease of tobacco in, I. 19.
Lycopersicum esculentum (see Tomato).
lycopersicum, Phytobacter.
Lycophotia infecta, on sugar-cane in Br. Guiana, I. 521, II. 58, 497.
Lycophotia margaritosa (*Peridroma saucia*) (Variegated Cutworm), on vegetables etc., in Canada, II. 24, 491, 677, III. 407, 469, 628; bionomics and control of, on lucerne, etc., in U.S.A., I. 54, 180, II. 245, 663, III. 178, 264, 265, 450, 471, 473, 570.
Lycophotia saucia (see *L. margaritosa*).
Lycophotia scandens (White Climbing Cutworm), in Canada, I. 84, II. 24, III. 628.
Lyctus brunneus, in stored timber in Britain, III. 677; damaging timber in Tasmania, I. 320.
Lyctus canaliculatus (see *L. linearis*).
Lyctus linearis, in timber in Britain, III. 677; damaging timber in Holland, I. 385.
Lyda, in forests in Russia, III. 728.
Lyda flaviventris (see *Neurotoma*).
Lyda nemoralis (see *Neurotoma*).
Lyda pyri (see *Neurotoma flaviventris*).
Lydella nigripes, parasite of *Bupalus piniarius* in Russia, III. 48.
Lydus syriacus, control of, on mustard in Astrachan, III. 638.
Lygaeonematus brevicornis, on apple in Britain, I. 91, 236.
Lygaeonematus erichsoni (Large Larch Sawfly), bionomics of, in Britain, I. 464, II. 54, 55, 119, 237, III. 78, 190, 559, 715;

bionomics of, in Canada, I. 401, 406, 412, II. 25, 412, III. 43, 70, 327, 507, 585; in Norway, III. 696; bionomics of, in Russia, II. 372.
Lygaeonematus moestus (see *L. brevicornis*).
Lygaeonematus pini (*Nematus abietum*), on pines in Germany, I. 371.
Lygaeus equestris, on mustard in Astrachan, III. 638; in Russia, I. 449, III. 7.
Lygaeus lateralis, in Montana, II. 536.
Lygaeus saxatilis, in Sicily, I. 172.
Lygidea mendax (False Apple Red Bug), bionomics and control of, on fruit trees in Canada and U.S.A., I. 154, 290, 406, II. 135, III. 193, 358, 373, 414, 473, 734.
Lygocerus, hyperparasite of *Rhopalosiphum ribis*, II. 81.
Lygocerus antennalis, parasite of *Aphis rumicis* (*euonymi*) in France, II. 620.
Lygocerus rufipes, parasite of *Aphis rumicis* (*euonymi*) in France, II. 620.
Lygris associata, on gooseberries in France, II. 622.
Lygus campestris, effect of nicotine spray on, in Denmark, III. 527; on gooseberries and black currants in Russia, III. 45; on chrysanthemum in Sweden, III. 251.
Lygus cuspidatus, on cinchona in East Africa, I. 415.
Lygus invitus (False Tarnished Plant Bug), bionomics of, in Canada and U.S.A., I. 126, 154, II. 134, 135, III. 465, 678; spreading *Bacillus amylovorus* on pear trees, III. 465.
Lygus kalmi, on fruit trees in Russia, III. 45.
Lygus pabulinus, on potato in England, III. 287; on fruit trees in Russia, III. 45.
Lygus pabulorum, on chrysanthemum and potato in Sweden, III. 251, 435.
Lygus (*Capsus*) *pastinacae*, on parsnips in France, I. 504.
Lygus pratensis (Tarnished Plant Bug), in Europe, II. 659; on lucerne, etc., in Russia, III. 7, 45, 479, 543; bionomics of, on crops in Canada and U.S.A., I. 182, 404, II. 159, 185, 288, 491, 593, 659, 675, 677, III. 68, 180, 348, 407, 551, 570, 571.
Lygus pratensis var. *campestris*, on *Malva* in Russia, III. 542, 543.
Lygus trabeatus, on cinchona in E. Africa, I. 415.
Lymantria dispar (Gipsy Moth), not occurring in Br. Columbia, I. 85; legislation against, in Canada, I. 48, II. 208, III. 9, 71; in Dalmatia, I. 238, 239; in France, II. 422; comparison of damage done by, and *Dasychira pudibunda* in Holland, III. 196; imported from Japan into other countries, I. 374, 401, III. 454; on cork and chestnut in Portugal, I. 313; bionomics and control of, in Russia, I. 357, 358, 362, 492, 496, 523, II. 9, 10, 13, 36, 42, 198, 254, 274, 275, 298, 329, 330, 334, 366, 428, 442, 463, 515, 637, 639, 700, 714, III. 21, 27, 43, 46, 50, 51, 52, 112, 221, 225, 392, 398, 399, 403, 482, 601, 606, 613, 641; not parasitised by *Telenomus* spp. or *Trichogramma semblidis* in Russia, I. 449, II. 523; on cork trees in Spain, II. 165; in orchards in Switzerland, I. 223; bionomics and control of, in U.S.A., I. 33–35, 53, 140, 141, 148, 154, 233, 234, 290, II. 101–103, 136, 156, 185, 186–188, 250, 294, 295, 710, 711, III. 43, 86, 194, 328, 330, 354, 357, 369, 372, 507, 513, 516, 531, 549, 657, 668, 710, 716; legislation against in U.S.A., III. 43, 513, 516, 657; diseases and natural enemies of, I. 336, 362, 481, 491, II. 101, 103, 104, 136, 187, 275, 295, 334, 343, 376, 422, 665, 710, 711, III. 329, 330, 507, 549, 716; effects of nicotine on, II. 50; parthenogenesis in, I. 166; selection of trees resistant to, I. 148, II. 711, III. 668.
Lymantria monacha (Nun Moth), in Bohemian forests, II. 720; destroyed by birds in Germany, II. 148; in Holland, I. 385; on forest trees in the United Kingdom, I. 463; bionomics of in Russian forests, I. 432, II. 341, III. 217, 392, 398, 699; in Saxony, I. 373; natural enemies and diseases of, I. 35, 432, III. 135.
Lymexylon dermestoides, on beech in Germany, II. 572.
Lyonetia clerkella, (Apple Leafminer), measures against, in Britain, III. 676; on fruit trees in Germany, II. 500; on fruit trees in Russia, II. 331, III. 67, 224, 604.
lyoni, *Euproctis*.
Lysimachia vulgaris, *Aphis rumicis* (*euonymi*) on, in France, II. 620

Lysiphlebus cardui, parasite of *Aphis grossulariae* and *Aphis pruni*, II. 81, 82.
Lysiphlebus (*Aphidius*) *ribis*, parasite of *Myzus ribis*, II. 81.
Lysiphlebus (*Aphidius*) *testaceipes*, parasite of *Aphis setariae* in Porto Rico, III. 134, 674; of *A. gossypii* in Russia, III. 476; of Aphids in U.S.A., I. 39, II. 153, 697, III. 516.
Lysol, against Aphids, I. 471, II. 207, III. 704; against *Clysia ambiguella*, I. 338; against weevils, I. 234, 235; against termites, I. 477; cost of, for spraying, II. 70; and Bordeaux mixture, II. 70, 296, 460; and kerosene, against froghoppers, I. 320, II. 61; and soap, II. 207, 522, III. 209; and tobacco extract, formula for, I. 471; ineffective against *Phaedon cochleariae*, III. 346; useless against *Oryctes rhinoceros*, II. 30.
Lythrum salicaria (Loosestrife), *Aphthona lutescens* on, in Holland, III. 742.
Lytta pilosella (see *Cantharis*).
Lytta vesicatoria, on ash and lilac in Russia, III. 50, 221, 225, 402, 601.

M.

Macaria liturata (see *Semiothisa*).
macellaria, *Ephydra*.
macgregori, *Mycodiplosis*.
Machaerocera, on sugar-cane in Mexico, I. 184.
machaon, *Papilio*.
Maclura aurantiaca (Osage Orange), not attacked by *Lachnosterna* or *Lymantria dispar* in U.S.A., III. 88, 669; *Aspidiotus perniciosus* on, II. 390.
Macrobasis unicolor, on potatoes, etc., in Canada and U.S.A., I. 243, 301, III. 70.
Macrobasis unicolor var. *murina*, on vegetables in Manitoba, I. 412.
Macrocentrus, parasite of *Scirpophaga intacta* in Java, III. 384; parasite of *Euxoa segetum* and *Feltia exclamationis* in Russia, III. 536.
Macrocentrus abdominalis, parasite of *Tortrix viridana* in England, III. 92.
Macrocentrus collaris (see *Amicroplus*).
Macrocentrus equalis, sp. n., in England, III. 92.
Macrocentrus marginator, parasite of *Aegeria tipuliformis* in England, III. 92.
Macrocentrus nitidus, in England, III. 92.
macrocephalus, *Eubazus*.
Macrocheles marginatus, attacking *Allorrhina nitida* in New Jersey, III. 566.
Macrochloa tenacissima (Alpha Grass), *Aelia acuminata* on, in Algeria, I. 422.
Macrodactylus subspinosus (Rose Chafer), bionomics of, on fruit, etc., in Canada and U.S.A., I. 405, II. 244, 458, III. 193.
Macrodactylus uniformis (Western Rose Chafer), in U.S.A., III. 11, 512.
Macrodyctium, parasite of *Aegeria exitiosa* in U.S.A., II. 120.
Macrodyctium omiodivorum (see *Bracon*).
macrogaster, *Tylenchus*.
Macrolabis corrugans, on parsnips in France, I. 505.
Macrolobium dewevrei, *Anaphe venata* on, in Africa, II. 548.
Macronoctua onusta, on Iris in U.S.A., III. 515.
macro-ocellatus, *Leptothrips*.
Macrophya punctum-album, on fruit trees in Russia, I. 206, 208.
Macrophya ribis, on gooseberries in France, II. 622.
Macrophya rufipes, on vines in France, II. 197; on vines in Italy, III. 112.
macrorhynchus, *Eriophyes*.
Macrosargus cuprarius (see *Sargus*).
Macrosiphon cyparissiae var. *cucurbitae*, on apple in Italy, III. 54.
Macrosiphoniella bedfordi, sp. n., on chrysanthemums in the Transvaal, II. 276.
Macrosiphoniella chrysanthemi, distribution of, on chrysanthemums, III. 749.
Macrosiphoniella fasciata, sp. n., on *Artemisia campestris* in Italy, III. 54.
Macrosiphum, British species of, I. 332, II. 55.
Macrosiphum antirrhinum, on *Antirrhinum* in E. Africa, II. 571.
Macrosiphum artemisiae, on *Artemisia tridentata* in Oregon, III. 588.
Macrosiphum artemisicola, on *Artemisia vulgaris* in Oregon, III. 588.
Macrosiphum canadense, in Oregon, III. 588.
Macrosiphum caraganae (see *Acyrthosiphon*).
Macrosiphum centranthi, sp. n., food plants of, in Britain, III. 762.
Macrosiphum cerasi, in Russia, III. 393.
Macrosiphum cereale (see *M. granarium*).

Macrosiphum cholodkovskyi, nom. n., on *Spiraea ulmaria* in Russia, III. 702.
Macrosiphum circumflexum, on beet in Russia, II. 467, III. 542.
Macrosiphum crataegi, on *Crataegus* in Maine, III. 423.
Macrosiphum creelii, sp. n., II. 604.
Macrosiphum destructor (see *Acyrthosiphon pisi destructor*).
Macrosiphum dirhodum, migrations of, in U.S.A., III. 352, 423.
Macrosiphum fragariae, on strawberries in England, III. 633; on strawberries in U.S.A., III. 516.
Macrosiphum fragariellum, on strawberries in England, II. 563.
Macrosiphum granarium (*Siphonophora cerealis*), on sorghum in E. Africa, II. 571; on oats and barley in Denmark, III. 246, 698; on oats in France, III. 428; on crops in Russia, I. 214, 357, 364, II. 171, 226, III. 206, 481, 601, 610; *Brachycolus noxius* mistaken for, in Russia, III. 307; migrations of, II. 406, III. 352.
Macrosiphum hederae, sp. n., on *Hedera helix* in Cape Town, III. 748.
Macrosiphum heucherae, on *Heuchera hartwegii* in California, III. 687.
Macrosiphum lactucae, on currants and gooseberries in Maine, II. 510.
Macrosiphum laevigatae, on willows in Maine, I. 467.
Macrosiphum (*Siphonophora*) *leptadeniae*, II. 345; on *Leptadenia lancifera* in W. Africa, II. 588, 631.
Macrosiphum lophospermum, sp. n., on *Lophospermum erubescens* in E. Africa, II. 276, 571.
Macrosiphum ludovicianae, on *Artemisia heterophila* in California, II. 251.
Macrosiphum lycopersicella, sp. n., on tomato and rape in E. Africa, II. 276, 571.
Macrosiphum lycopersici (Tomato Aphis), on tomato in U.S.A., II. 160; *Hemerobius pacificus* predaceous on, III. 570.
Macrosiphum mentzeliae, sp. n., on *Mentzelia* in Oregon, III. 588.
Macrosiphum neavei, sp. n., in Nyasaland, II. 276.
Macrosiphum nigrinectaria, sp. n., on peas in E. Africa, III. 748.
Macrosiphum oregonense, on *Artemisia* in Oregon, III. 588.
Macrosiphum orientale, sp. n., on *Blumea balsamifera* in Java, I. 139.
Macrosiphum pisi (see *Acyrthosiphon*).
Macrosiphum pteridis, sp. n., on *Pteris aquilina* in Oregon, III. 588.
Macrosiphum (*Siphonophora*) *rosae* (Rose Aphis), III. 748; on roses in Holland, II. 642; on roses in Russia, III. 45, 220, 601, 606, 610; bionomics of, on roses in U.S.A., II. 439, 527, III. 192, 419, 423, 761.
Macrosiphum rosaecola, III. 748.
Macrosiphum rosaefolium, sp. n., on roses in Egypt, III. 748.
Macrosiphum rosaeformis, sp. n., on roses, III. 748.
Macrosiphum rosaeollae, sp. n., on roses, III. 748.
Macrosiphum (*Siphonophora*) *rosarum*, on roses in Holland, II. 642.
Macrosiphum rubi, on *Rubus* in Russia, II. 79, 82.
Macrosiphum rubicola, on wild raspberry in Maine, III. 424.
Macrosiphum rudbeckiae, in California, II. 251.
Macrosiphum sanborni, parasitised by *Leucopis nigricornis* in Hawaii, I. 392.
Macrosiphum (*Siphonophora*) *scabiosae*, on tobacco in Russia, II. 515.
Macrosiphum solanifolii, on roses in Maine, III. 423; on maize and potatoes in U.S.A., I. 55, 101; on roses, III. 748.
Macrosiphum sonchi, food-plants of, III. 748.
Macrosiphum venaefuscae, II. 604.
Macrosiphum viticola (Brown Grape Aphis), life-history of, in U.S.A., III. 566-567.
Macrosporium solani, infesting potatoes in California, III. 688.
Macrothylacia rubi, on lucerne in Europe, I. 527.
macula-alba, Ceuthorrhynchus.
maculata, Megilla ; Mylabris.
maculator, Pimpla (*Itoplectis*).
maculatus, Camponotus ; Chaitophorus ; Harpiphorus ; Tetraonyx ; Trimeromicrus.
maculicornis, Phyllobius.
maculifer, Tetrastichus.
maculipennis, Livia ; Plutella.
maculiventris, Podisus.
maculosa, Diacrisia ; Nemorilla.
Madagascar, Ichneumonids in, II. 215; measures against grasshoppers in, III. 293; miscellaneous insect pests in, I. 217, 411, 526, II. 425, 540, 575, III. 276; *Oryctes* spp. on palms

in, II. 99; pests of coconuts in, I. 424, 425; possible parasites of *Phytalus smithi* in, III. 756; scale-insects on cassava in, II. 92, 425; sericulture in, I. 286; vanilla pests in, III. 57.
madagascariensis, Pseudococcus virgatus.
Madaro Potato Vine, *Estigmene acraea* on, in California, III. 85.
Madeira, *Hemerophila nemorana* in, III. 11.
Madica verrucifera, on sisal in E. Africa, I. 414.
madiunensis, Chionaspis.
Madras, insect pests of, II. 139, 140, 242, III. 174, 677; pests of rice in, I. 344, II. 67, 68, 69, 139.
Madrona, pests of, in California, III. 150, 580.
Maenas laboulbenei, on rice in Br. Guiana, II. 568.
Mafuta Disease of Cotton, caused by Aphids, II. 283, 581.
Magdalis aenescens (Bronze Apple-tree Weevil), on fruit trees in Br. Columbia, I. 135, 413, II. 676, 677.
Magdalis armicollis (Elm Weevil), in Illinois, I. 116.
Magdalis gracilis, on almonds in California, II. 555.
Magdalis violacea, on pines in Russia, II. 523, III. 50.
magdalis, Thymelicus.
magna, Idacantha.
magnani, Colobopyga.
Magnesium Oxide, II. 97, 561.
Magnesium Sulphate, against *Blaniulus guttulatus*, II. 557.
magnicornis, Capsus.
magnifica, Heterusia; *Trinacriella.*
magnoguttata, Mylabris.
Magnolia, not attacked by *Aspidiotus perniciosus*, I. 472; possible food-plant of *Polychrosis botrana*, III. 210.
magnoliarum, Eulecanium (*Lecanium*).
Magpie, destroying noxious insects, II. 222, III. 196.
Magpie Moth (see *Abraxas grossulariata*).
Mahasena graminivora, on cereals in India, I. 169.
Mahogany, Pyralid moth on, in Mauritius, III. 730; immune to termites, III. 379.
Mahogany, African (see *Khaya senegalensis*).
maia, Hemileuca.
maidis, Aphis; *Peregrinus*; *Sipha.*
maidi-radicis, Aphis.
Maine, Aphids in, I. 24, 25, 467, II. 208, 509, 510, III. 357, 423; bionomics of *Cydia pomonella* in, III. 717; control of gipsy and brown-tail moths in, II. 136, 251, 393, 710, 711; *Dendroctonus piceaperda* on spruce timber in, II. 24; *Eriophyes pyri* in, II. 709; insect pests in, I. 140-143, 200, 201, 202, III. 57, 267; leaf-hoppers of, III. 529; strawberry pests in, III. 17; *Tetranychus telarius* (*bimaculatus*) on cotton in, I. 353.
Maize (*Zea mays*), *Sesamia vuteria* on, in Algeria, I. 43; pests of, in Australia, II. 20, III. 24, 364; *Atta* spp. on, in Brazil, II. 28; *Melolontha* on, in Bukovina, II. 640; *Calandra oryzae* intercepted on, in California, III. 626; pests of, in Canada and U.S.A., I. 101, 124, 262, 265, 299, 400, 429, II. 120, 121, 160, 227, 303, 361, 392, 393, 491, 519, 524, 664, 696, III. 18, 176, 178, 184, 193, 298, 299, 335, 370, 425, 450, 459, 470, 472, 509, 512, 516, 566, 568, 573-575, 581, 683, 693, 708, 710, 761; pests of, in E. Africa, I. 39, 247, 414, 415, III. 125; pests of, in Egypt, I. 501, III. 749; pests of, in the Far East, I. 169, 170, II. 489, 490, III. 385, 644; pests of, in France, I. 409, II. 420; Aphids on, in the French Sudan, II. 273, 396, 631; *Anisoplia agricola* on, in Germany, II. 500; not attacked by *Chloridea obsoleta* in Hawaii, II. 629; *Oscinella frit* on, in Holland, III. 200; pests of, in India, II. 67, 68; pests of, in Italy, II. 511, III. 124; pests of, in Mauritius, III. 730, 756; pests of, in Nyasaland, I. 272, II. 277; pests of, in the Philippines, I. 154, 157, 482; *Sesamia vuteria* on, in Portugal, I. 313; not attacked by *Oria musculosa* in Russia, II. 319, 392, III. 5; pests of, in Russia, I. 357, 459, 460, 485, 487, 493, 496, 530, II. 33, 34, 43, 44, 170, 171, 172, 248, 261, 262, 312, 395, 515, 715, 718, III. 41, 44, 46, 47, 75, 98, 148, 226, 341, 396, 403, 487, 540, 541, 543, 600, 700; pests of, in South Africa, I. 144, II. 299, 706, III. 167, 174, 359-361; pests of, in South Nigeria, II. 107, III. 164-166; pests of, in the West Indies, I. 181, 253, 328, 517, II. 32, 87, 532, III. 301, 476,

477, 555, 674, 679; (stored) pests of, and their control, II. **40, 204, 382, 573**, III. **487**.
Maize Stalk Borer (see *Busseola fusca* and *Pyrausta vastatrix*).
major, Cryphalus; *Tetranychus*; *Tylenchus*.
majuscula, Chrysopa.
Malabar, *Odontotermes* on coconut in, II. **139**; pests of rice in, II. **67, 139**.
malabaricus, Phassus.
Malachius, predaceous on vine moths in France, I. **524**, II. **410, 589**.
Malachius bipunctatus, predaceous on vine moths in Italy, II. **679**.
Malachius bipustulatus, predaceous on vine moths in France and Russia, I. **365**, II. **607**, III. **211**.
Malachra rotundifolia, Diaprepes abbreviatus spengleri on, in Porto Rico, III. **680**.
Malacosoma, in Canada and U.S.A., I. **90**, II. **665, 675**, III. **68, 137, 372, 552, 656**.
Malacosoma americana (Apple-tree Tent-caterpillar), declared a pest in Br. Columbia, I. **48**; bionomics and control of, in Canada, I. **87, 141, 231, 401, 403, 404**, II. **94, 491, 665**, III. **69, 551, 584**; bionomics and control of, in U.S.A., I. **33, 141, 281, 381, 382**, II. **104, 183, 485, 709**, III. **87, 180, 415, 472, 508**.
Malacosoma californica, on live oak and apple in California, III. **15**.
Malacosma (*Lasiocampa*) *castrensis*, in Russia, III. **221, 400**.
Malacosoma constricta, on oak and prune in Canada and U.S.A., I. **130, 413**, III. **15**.
Malacosoma disstria (Forest Tent-caterpillar), bionomics of, in Canada, I. **166, 231, 401, 403**, II. **94, 491, 665**, III. **69, 551, 553, 584**; in U.S.A., I. **141**, II. **104, 183**, III. **86, 180, 415, 473, 474, 531, 559, 673**.
Malacosoma erosa, in Canada, I. **86, 413**, II. **676**; in Oregon, I. **130**.
Malacosoma fragilis (Great Basin Tent-caterpillar), in California, III. **15**.
Malacosoma lusitanica, on vines in France, II. **421**.
Malacosoma neustria, remedies against, in Belgium, II. **501**; in Germany, II. **499**; in Holland, III. **196**; bionomics and control of, on fruit trees in Russia, I. **206, 208, 359, 432, 449, 488, 492, 496, 522, 541**, II. **36, 42, 44, 264, 298, 428, 442, 463, 522**, III. **27, 41, 46, 50, 51, 52, 139, 204, 221, 311, 392, 398, 399, 403, 482, 485, 601, 606, 613, 639**; effects of nicotine on, II. **50**; destroyed by *Parus major*, II. **147**.
Malacosoma pini (see *Dendrolimus*).
Malacosoma pluvialis, bionomics of, in Canada and U.S.A., I. **130, 413**, III. **15, 759**.
Malay Archipelago, *Papilio memnon* on citrus in, II. **311**; *Xylotrupes nimrod* on coconut in, II. **689**; (see also Federated Malay States).
Malay Rose Apple (*Eugenia malaccensis*), *Dacus ferrugineus* on, in the Philippines, I. **157**.
mali, Aphis (see *A. pomi*); *Atractotomus* (*Capsus*); *Empoasca*; *Eriophyes*; *Lecanium*; *Myzus*; *Psylla*; *Scolytus* (*Eccoptogaster*).
malifoliae, Eriophyes.
malifoliella, Tischeria.
malinellus, Hyponomeuta (*Yponomeuta*).
malinus, Epitrimerus; *Heterocordylus*.
malivorella, Coleophora.
Mallodon dasystomus, food-plants of, in U.S.A., III. **579**.
Mallodon downesi, on *Manihot glaziovii* in Belgian Congo, III. **648, 649**; on rubber in E. Africa, I. **414**, II. **415**.
Mallodon melanopus (see *Archodontes*).
malloti, Chionaspis.
Mallotus philippinensis, Chionaspis malloti on, in Ceylon, III. **168**.
Mallow (*Malva*), *Amsinckia intermedia* on, in California, II. **555**; *Phytometra californica* on, in U.S.A., III. **270**; pests of, in Russia, III. **543**.
Mally Remedy, against fruit-flies in South Africa, I. **195**, III. **36**; against tobacco pests in Southern Rhodesia, I. **287**, II. **706**; against *Argyroploce leucotreta*, III. **502**.
Malpighia glabra (Barbados Cherry), *Duomitus punctifer* on, in Barbados, II. **533**; pests of, in Br. Guiana, II. **417**.
Malta, biscuits destroyed by *Ephestia kühniella* in, I. **292**; *Icerya purchasi* in, II. **193**.
Malta Plum (see Loquat).
Maltese Clover (*Hedisarum coronarium*), pests of, in Italy, II. **511**.
Malus (see Apple).
malus, Hemisarcoptes.
Malva (see Mallow).

Malva neglecta, Acyrthosiphon skriabini on, in Russia, III. 702.
Malva rotundifolia, Feltia exclamationis and *Euxoa segetum* on, in Russia, II. 212, 312.
malviellus, Hyponomeuta.
Mamestra, parasitised by *Trichogramma fasciatum*, in Russia, II. 335; trapped with molasses in Russia, I. 63.
Mamestra brassicae (see *Barathra*).
Mamestra canadensis (see *Polia nevadae*).
Mamestra chenopodii (see *Scotogramma trifolii*).
Mamestra dissimilis (see *Polia suasa*).
Mamestra persicaria (see *Polia*).
Mamestra picta (see *Ceramica*).
Mamestra pisi (see *Polia*).
Mamestra trifolii (see *Scotogramma*).
manca, Gyrophaena.
mancus, Agriotes; *Xyleborus.*
Mandarine Orange (*Citrus nobilis*), *Ceratitis capitata* on, in the Mediterranean region, III. 143, 744; *Lepidosaphes beckii* on, in Paraguay, III. 705.
manducator, Alysia.
Mangels, pests of, in Britain, II. 615, 660, 661; pests of, in Canada and U.S.A., I. 292, 299, II. 665, III. 18, 351; *Aphis rumicis* on, in Germany, II. 494; *Laphygma exigua* on, in Rhodesia, III. 359; Aphids on, I. 77, II. 494, 660, 661, III. 351.
Mangifera indica (see Mango).
Mangifera odorata, Coptotermes gestroi on, in Java, I. 355.
Mangifera verticillata, Aspidiotus destructor imported on, into U.S.A. from the Philippines, III. 455.
mangiferae, Coccus; *Cryptorrhynchus*; *Rhynchaenus* (*Orchestes*).
Mango (*Mangifera indica*), scale-insects on, in Australia, III. 80, 503; pests of, in Br. Guiana, II. 417; legislation against pests of, in California, I. 269; pests of, in Ceylon, II. 142, 654, III. 123; pests of, in E. Africa, I. 258, 414, 415, II. 146, 147, 283; fruit-flies on, in Hawaii, I. 374, III. 29; pests of, in India, II. 339, 427, 583, III. 300, 444; pests of, in Java, II. 535, III. 3, 713; seldom attacked by *Ceratitis capitata* in Madagascar, III. 277; *Helopeltis antonii* on, in the Philippines, III. 137; regulations regarding removal of, in S. Africa, II. 83; pests of, imported into U.S.A., II. 460, 461, III. 455, 626; pests of, in U.S.A., I. 99, II. 152, 436, III. 326; pests of, in W. Africa, II. 354, 671; pests of, in West Indies, I. 97, 165, 390, II. 50, 216, III. 585, 651, 662; *Heliothrips rubrocinctus* on, I. 99.
Mango Bark Borer (see *Plocaederus ruficornis*).
Mango Fly (see *Dacus ferrugineus*).
Mango Hopper (see *Idiocerus*).
Mango Scale (see *Pulvinaria psidii*).
Mango Shield Scale (see *Coccus mangiferae*).
Mango Weevil (see *Cryptorrhynchus mangiferae*).
Mangold (see Mangels).
Mangold Aphis, Green (see *Rhopalosiphum betae*).
Mangold Aphis, Short-syphoned (see *Aphis brevisiphona*).
Mangold Black Aphis (see *Aphis rumicis*).
Mangrove (see *Heritiera* and *Rhizophora mucronata*).
Mania maura, on lettuce in France, I. 504.
maniae, Spilochalcis.
Maniçoba Rubber (see *Sapium*).
Manihot glaziovii (Ceará Rubber), pests of, in Brazil, I. 351, II. 194; pests of, in Ceylon, II. 191, 192; pests of, in Tropical Africa, I. 247, 351, 414, II. 283, 415, 429, 592, III. 648; *Pseudococcus bicaudatus* on, in Java, III. 648.
Manihot utilissima (see Cassava).
Manioc (see Cassava).
Manioc Ant (see *Atta sexdens*).
Manitoba, forest pests in, I. 407, II. 25; miscellaneous pests of, I. 201, 401, 412, III. 70, 327, 369.
mansutor, Exochus.
Mantis, imported into New Jersey from Japan, III. 354.
Manzanita, pests of, in California, I. 168, 384, III. 275, 420.
manzanita, Aulacaspis.
Maple (*Acer*), *Melolontha* spp. on, in Austria, II. 640; pests of, in Canada, I. 231, 401, II. 492, III. 515; *Exomias pellucidus* on, in England, III. 288; pests of, in France, II. 195, 402; *Eriophyes macrorhynchus* on, in Germany, II. 501; pests of, in Russia, II. 45, III. 119, 182, 543; spinning mites on, in Sweden, III. 253; *Tortrix forskaleana* on, in Sweden, II. 168; pests of, imported into U.S.A., II. 186, III. 117, 513, 558; pests of, in U.S.A., I. 3, 100, 141, 203, 225, 243, 280, II. 247, 294, 394, 663, 680, 707, III. 85, 191, 357, 373, 414, 415, 531, 668, 671, 673, 709.

Maple, Mountain, pests of, in Russia, III. 544; not resistant to gipsy moth, II. 711.
Maple, Red (see *Acer rubrum*).
Maple, Silver (see *Acer saccharinum*).
Maple, Striped, not resistant to gipsy moth, II. 711.
Maple, Sugar (see *Acer saccharinum*).
Maple Aphis (see *Drepanaphis acerifolii*).
Maple Scale, Cottony (see *Pulvinaria innumerabilis*).
marabitanos, Coptotermes.
maracandica, Eurydema.
Maranta, scale-insects intercepted on, in California, III. 558.
Maranta arundinacea (see Arrow-root).
Marasmarcha atomosa, on pigeon peas in Nigeria, III. 167.
Marasmarcha phaeodactyla, on beet in Russia, II. 466.
Marasmia trapezalis, on maize and sugar-cane in the Far East, I. 170, II. 490.
Marasmius sacchari, on sugar-cane in Barbados, II. 532.
marcella, Depressaria.
marchali, Pseudococcus (see *P. virgatus*).
marci, Bibio.
marcidella, Eucosma (*Crocidosema*).
marcovitchi, Geniocerus.
margaritalis, Botys; *Orobena* (see *Evergestis extimalis*).
margaritosa, Lycophotia (*Peridroma*).
Margarodes niger, bionomics of, in India, I. 158.
Margarodes papillosus, bionomics of, in India, I. 158.
Margarodes unionalis, on olives in Palestine, II. 623.
Margarodes vitium, on vines in Italy, III. 113.
marginalis, Cymindis; *Dacus vertebratus*; *Lepidosaphes*; *Orthotylus*; *Systena*; *Trichothrips.*
marginaria, Hybernia.
marginata, Aegeria (*Bembecia*); *Epicauta*; *Pentaphis*; *Pimpla* (*Hoplectis*).
marginator, Macrocentrus.
marginatum, Copestylum.
marginatus, Alurnus; *Chauliognathus*; *Diaprepes abbreviatus*; *Macrocheles*; *Scapsipedus*; *Syromastis* (*Mesocerus*).
marginicollis, Potosia; *Scymnus.*
marginipennis, Exochomus.
margiscutellum, Elasmus.
Marguerite, *Phytomyza* on, in England, III. 660.
Marguerite Fly (see *Phytomyza chrysanthemi*).
maritimus, Pseudococcus (*Dactylopius*).
Markhamia platycalyx, Stictococcus dimorphus on, in Uganda, III. 288.
Marlatt Scale (see *Phoenicococcus marlatti*).
marlatti, Parlatoria; *Phoenicococcus.*
Marmara, on apples in Virginia, III. 545.
Marmara elotella (see *Gracilaria*).
Marmara fasciella (see *Gracilaria*).
Marmara fulgidella, on oak and chestnut in U.S.A., II. 132.
Marmara opuntiella, on cactus. I, 82.
marmorata, Frea.
maroccanus, Dociostaurus (*Stauronotus*); *Sciapteron.*
marrocana, Eurygaster.
Marquesas Islands, *Graeffea cocophaga* on coconuts in, II. 691.
Marram-grass (see *Psamma arenaria*).
Marrow, Vegetable, *Dacus cucurbitae* on, in Ceylon, I. 89; pests of, in England, II. 564, III. 659; pests of, in France, I. 504; *Carpomyia pardalina* on, in India, II. 426; (see Squash).
marsdeni, Blepyrus.
Marsh Tit, destroying insects, I. 478.
marshalli, Mirotermes.
Marshmallow, destruction of, against *Desiantha nociva*, II. 119.
Martens, destroying insects in Ottawa, II. 307.
Martinezia caryotaefolia, Oryctes rhinoceros on, in Strait Settlements, II. 99.
Martinique, root borers in, II. 693; use of carbon bisulphide against insect pests in, II. 602.
Maruca testulalis, on green gram in Sumatra, III. 248.
Maryland, insect pests in, I. 238, 295, II. 119, 120, 361, 524, III. 136, 266, 370, 380, 475.
Masicera, in Canada, I. 114; parasite of *Phytometra* (*Plusia*) *chalcytes* in Nyasaland, I. 272; parasite of *Colias eurytheme* in U.S.A., III. 153.
Masicera cespitum, parasite of *Dendrolimus segregatus* in Siberia, II. 223.
maskelli, Leucaspis (*Fiorinia*); *Morganella*; *Pulvinaria.*
Mason Bee, predaceous on *Alabama argillacea* in the West Indies, I. 83.
Massachusetts, I. 264, 295; bionomics and control of gipsy and brown-tail moths in, I. 34, 47, 141, 234, 402, II. 187, 251, 393, 394, III. 710; cranberry pests in,

III. 531; miscellaneous pests in, I. 55, 140, 231, II. 184, 381, III. 57, 77, 85, 301; a parasite of *Aspidiotus perniciosus* in, II. 190, III. 131.
Mastochilus australasiae, in Queensland, III. 491.
Mataeus orientalis, on *Ficus elastica* in E. Africa, I. 413.
mathias, Parnara.
Matricaria chamomilla, Aphis chrysanthemi on, in Britain, III. 762.
matronula, Epilachna; Pericallia.
Maura bolivari, on tobacco in Nyasaland, II. 277.
maura, Mania.
Maurandia barclayana (see *Lophospermum erubescens*).
mauritanica, Tenebroides (*Trogosita*).
mauritia, Spodoptera.
mauritialis, Pyralis.
mauritii, Ophion.
Mauritius, beneficial parasites in, II. 215, III. 383; control of grasshoppers in, III. 293; *Ephestia kühniella* in biscuits in, I. 292; introduction of beneficial insects into, from South Africa, II. 611, 612; legislation to prevent introduction of insect pests into, I. 399; miscellaneous pests in, I. 351, 526, II. 612, III. 160, 730–732, 756; pests of sugar-cane in, I. 28–31, 399, II. 46, 215, 612, III. 160, 730, 756; pests on mango imported from, into U.S.A., II. 461.
maurus, Corymbites; Eurygaster.
maxillosa, Eumenes.
maxillosum, Psalidium.
maxillosus, Conocephaloides; Gnathocerus (*Echocerus*).
maxima, Tipula.
maximus, Oxysternus.
May Beetles (see *Lachnosterna* spp.).
Mayetiola (*Cecidomyia*) *avenae*, on oats in France, II. 420, III. 428; on grain in Russia, II. 172.
Mayetiola (*Cecidomyia*), *destructor* (Hessian Fly), in Denmark, III. 246; bionomics and control of, in Russia, I. 216, 357, 364, 458, 459, 460, 484, 490, II. 5, 34, 35, 37, 43, 65, 66, 172, 201, 333, 342, 352, 370, III. 41, 47, 51, 52, 111, 128, 147, 183, 203, 206, 226, 229, 337, 398, 481, 601, 635; bionomics of, on barley in Tunisia, II. 231, 232; bionomics of, in U.S.A. and Canada, I. 405, 527, 528, II. 120, 225, 412, 492, III. 25, 249, 290, 416, 420, 426, 630, 708; parasitised by *Polygnotus minutus*, III. 252.
Maytenus boaria, Dinaspis on, in Chile, III. 303.
Meal Snout Moth (see *Pyralis farinalis*).
Meal Worm, experiments with insecticides against, III. 284.
Meal Worm, Yellow (see *Tenebrio molitor*).
Mealy Bug (see *Pseudococcus*).
Mealy Bug, Citrus (see *Pseudococcus citri*).
Mealy Bug, Long-tailed (see *Pseudococcus adonidum*).
Mealy Bug, Pink (see *Pseudococcus calceolariae*).
Mealy Plum Aphis (see *Hyalopterus arundinis*).
Mecaspis alternans, destroyed by rooks in Russia, III. 342.
Mecopus bispinosus, on *Ficus* in Java, II. 535.
Mecostethus grossus (see *Stethophyma*).
Mecostylus vittaticollis, on coca in E. Africa, I. 414.
Medeterus signaticornis, parasite of bark beetle in Sweden, III. 147.
medianus, Iphiaulax.
medicaginis, Aphis; Coleophora; Contarinia; Habrocytus; Hypera.
Medicago denticulata (Bur Clover), pests of, in U.S.A., III. 333, 576.
Medicago falcata, pests of, in Russia, II. 263, III. 703.
Medicago hispida (Bur Clover), *Bruchophagus funebris* on, in U.S.A., III. 185.
Medicago lupulina, Sitones humeralis on, in Italy, II. 181.
Medicago minima, Sitones humeralis on, in Italy, II. 181.
Medicago sativa (see Lucerne).
medinalis, Cnaphalocrocis.
medione, Ergolis.
mediopunctata, Pleurotropis.
meditabunda, Edessa.
Mediterranean Flour Moth (see *Ephestia kühniella*).
Mediterranean Fruit Fly (see *Ceratitis capitata*).
Medlar, Common (*Mespilus germanica*), pests of, in Russia, II. 79, 419, III. 310, 535, 545.
Megacanthopus indeterminabilis, in the Virgin Islands, III. 736.
megacephala, Pheidole; Trigonogastra.
megacephalus, Brachytrypes.
megaceps, Gnophothrips.
Megachile, Trichodes alvearius in nests of, in Italy, III. 40.
megalocephala, Epicauta.
Megalopyge krugii, bionomics of, on coffee in Porto Rico, III. 517.

megaptera, Trigonaspis.
Megasphasma denticrus, on apple in Missouri, III. **181.**
Megastigmus, on Conifers in Sweden, II. **243**; phytophagous habits of, III. **727.**
Megastigmus aculeatus, in rose seeds in N. America, I. **297.**
Megastigmus albifrons, in seeds of *Pinus ponderosa* in N. America, I. **297.**
Megastigmus borriesi, in seeds of *Abies mariesi* from Japan in N. America, I. **297.**
Megastigmus brevicaudis, in seeds of *Sorbus* in N. America, I. **297.**
Megastigmus flavipes, I. **297.**
Megastigmus laricis, sp. n., in larch seeds in U.S.A., III. **149.**
Megastigmus lasiocarpae, in seeds of *Abies lasiocarpa* in N. America, I. **297.**
Megastigmus nigrovariegatus, in rose seeds in N. America, I. **297.**
Megastigmus physocarpi, in seed-capsules of *Physocarpus opulifolius* in N. America, I. **297.**
Megastigmus piceae, on spruce in Colorado, III. **407.**
Megastigmus pinus, in seeds of Conifers in N. America, I. **297.**
Megastigmus spermotrophus, damaging forest trees in Britain, I. **464**; in seeds of Conifers in N. America, I. **297.**
Megastigmus tsugae, in seeds of *Tsuga mertensiana hookeriana* in N. America, I. **297.**
Megilla fuscilabris, predaceous on *Mesogramma polita* in U.S.A., III. **569.**
Megilla innotata, preying on Aphids in Porto Rico, I. **185**, II. **49**, III. **674.**
Megilla maculata, predaceous on Lepidopterous larvae in Br. Guiana, I. **521**, II. **520**; introduced into Sumatra from U.S.A., I. **14**, III. **203**; predaceous on *Blissus leucoptera* and other insects in U.S.A., II. **227**, III. **115, 463, 471, 576**; parasitised by *Perilitus americanus* in Virginia, II. **131.**
Megoura solani, on tomatoes in Florida, III. **178.**
Megoura viciae, on *Lathyrus* in Russia, III. **704.**
Meibomia, Cerotoma trifurcata on, in U.S.A., III. **453.**
Melaleuca, pests of, in Australia, III. **80, 491.**
Melaleuca leucadendron, Lecaniodiaspis melaleucae on, in Australia, III. **751.**
Melaleuca nodosa, scale-insects on, in Australia, III. **652.**
melaleucae, Ceroplastodes; *Lecaniodiaspis.*
Melampsalta incepta, damaging peaches in New South Wales, I. **503.**
Melampsora, infesting osiers in France, I. **334.**
Melanactes, on wheat in Canada, III. **507.**
Melanauster chinensis, on fruit in Japan, I. **520.**
Melanchroia cephise (see *M. corvaria*).
Melanchroia corvaria, on *Phyllanthus distichus* in Porto Rico, III. **517.**
Melanconium sacchari (Rind Disease), on sugar-cane in West Indies, I. **185**, II. **49, 88.**
Melanerpes erythrocephalus, destroying *Diabrotica duodecimpunctata* in U.S.A., I. **431.**
melania, Angitia (*Dioctes*).
melanias, Elenchus.
melanictera, Enaria.
Melanitis ismene, on sugar-cane and rice in the Far East, II. **490**; bionomics of, on rice in India, II. **67, 487.**
Melanitis leda, on sugar-cane in Mauritius, I. **31.**
melanocerus, Anthocoris.
melanocornis, Cyrtacanthacris (*Acridium*).
melanocotis, Paniscus.
melanoderes, Dysdercus.
melanogaster, Drosophila.
melanommata, Frankliniella.
melanoneura, Mussidia; *Psylla.*
melanopa, Lema.
Melanophila, on Douglas fir in U.S.A., III. **670.**
Melanophila carolina, on pines in North Carolina, I. **160.**
Melanophila decastigma, on poplars in Russia, I. **460, 461.**
Melanophila fulvoguttata, on hemlock, etc., in U.S.A., III. **87, 474.**
melanophthalmus, Chilocorus.
melanopleura, Adalia.
Melanoplus angustipennis, on cereals, I. **412.**
Melanoplus atlantis, bionomics of, on cereals, etc., in Canada and U.S.A., I. **412**, II. **249, 491**, III. **82, 181, 263, 297, 368, 450, 466, 551.**
Melanoplus bivittatus (Two-striped Grasshopper), bionomics of, on cereals, etc., in Canada and U.S.A., I. **412**, II. **249, 536**, III. **82, 181, 297, 368.**
Melanoplus cinereus, in California, II. **245.**

Melanoplus dawsoni, on cereals in Manitoba, I. **412.**
Melanoplus devastator, in California, II. **245.**
Melanoplus differentialis, bionomics of, in U.S.A., II. **249**, III. **81**, **181**, **297**, **513.**
Melanoplus femoratus, control of, in U.S.A., III. **181**, **450.**
Melanoplus femur-rubrum (Red-legged Grasshopper), bionomics of on cereals in Canada and U.S.A., I. **301**, **412**, III. **82**, **181**, **263**, **368**, **415**, **466.**
Melanoplus packardi, on cereals in Manitoba, I. **412.**
Melanoplus vittatus, on lucerne, etc., in U.S.A., III. **466.**
melanopus, *Archodontes* (*Mallodon*); *Diapromorpha*; *Lema.*
melanosa, *Sphaerophoria.*
melanoscelis, *Apanteles.*
Melanosphora diabroticae (see *Celatoria*).
Melanostoma mellinum, on peas in Russia, III. **481.**
Melanotus brunnipes, on sunflowers in Russia, III. **46**, **480.**
Melanotus castaneipes, on *Pinus sylvestris* in England, I. **157.**
Melanotus communis, on cereals in Canada and U.S.A., II. **664**, III. **299.**
Melanotus cribulosus, on cereals in U.S.A., III. **299.**
Melanotus fissilis, on cereals in U.S.A., III. **299.**
Melanotus punctolineatus, on maize in Russia, III. **541.**
Melanotus rufipes, bionomics of, in Russia, II. **466**, III. **221.**
Melanoxantherium antennatum, on willows in Maine, I. **467.**
Melanoxantherium bicolor, on willows in Maine, I. **467.**
Melanoxantherium salicis, on willows in England, III. **660**; on willows in Maine, I. **467.**
Melanoxantherium sinithiae, on willows in Maine, I. **467.**
melas, *Pterostichus.*
Melasoma aeneum, in Norway, III. **697**; in Russia, III. **50.**
Melasoma populi, bionomics of, in France, I. **333**, **334**; on poplar in North Italy, III. **124**; in Russia, III. **50**, **613.**
Melasoma (*Lina*) *scripta* (Striped Poplar Beetle), control of, on apple in Minnesota, III. **161**; on poplars and willows in New Jersey, III. **515**; experiments on, with zinc arsenite, I. **284.**
Melasoma tremulae, in the Crimea, III. **613.**
Meleagris gallopavo (Wild Turkey), destroying *Diabrotica duodecimpunctata* in U.S.A., I. **431.**
meles, *Hypera.*
Melia azedarach, *Tetranychus* on, in Ceylon, III. **725**; *Pseudococcus filamentosus* on, in E. Africa, II. **146.**
Meliana (*Heliophila*) *albilinea*, on grain in U.S.A., III. **370.**
Melica, *Aphis avenae* on, in U.S.A., II. **696.**
melicerta, *Achaea* (see *A. janata*).
melichlorus, *Tetrastichus.*
Meligethes, on apples in Britain, II. **563**, III. **659**; on rape in Russia, III. **481.**
Meligethes aeneus, on turnip and cabbage in Denmark, III. **247**, **699**; on kohlrabi and rape in Germany, II. **501**; on cabbage in Holland, I. **385**; on cabbage in Norway, III. **107**; on rape, etc., in Russia, I. **396**, II. **648**, III. **397**, **543.**
Meligethes brassicae, on mustard in Russia, III. **481.**
Melilot (see *Melilotus officinalis*).
Melilotus alba, *Phytometra californica* on, in Montana, III. **457**; pests of, in Russia, II. **263**, **669.**
Melilotus macrorrhizus, *Perrisia onobruchidis* on, in Russia, II. **263.**
Melilotus officinalis (Yellow Sweet Clover), *Hypera variabilis* on, in France, II. **577**; pests of, in Russia, II. **263**, **465**, **669**; *Stictocephala festina* on, in U.S.A., III. **333.**
melinus, *Palorus.*
Meliphora grisella (see *Achroia*).
Melisomimas metallica, sp. n., on *Albizzia* in Sierra Leone and Nigeria, III. **168.**
Melissoblaptes rufovenalis, bionomics of, on coconut in Java, III. **315**, **714.**
Melitaea didyma, in Russia, III. **400.**
Melitara, recommended to be introduced into Queensland to destroy cactus, III. **126.**
Melitara dentata, on cactus in U.S.A. I. **82.**
Melitara fernaldialis, on cactus in U.S.A., I. **82.**
Melitara junctolineella, on cactus in U.S.A., I. **81.**
Melithreptus scriptus (see *Sphaerophoria*).
Melitomma insulare, on coconut in the Seychelles, I. **424**, II. **568.**
Melittia satyriniformis (Squash-vine Borer), on vines and melons, etc., in U.S.A., I. **419**, III. **193**, **471**, **510.**

Melittobia, I. 549.
Melittobia hawaiiensis, parasite of *Ereunetis flavistriata* in Hawaii, III. 681.
mella, Tachina.
mellea, Decatoma.
mellicollis, Disonycha.
mellifera, Apis.
mellinum, Melanostoma.
mellipes, Odontomerus.
mellitor, Microbracon.
mellonella, Galleria.
Melocanna bambusoides, Cyrtotrachelus longipes on, in India, I. 354.
Meloë, on cotton and clover in N. Carolina, I. 243; not attacked by *Carabus*, II. 474.
Meloë impressus, on turnips in N. Carolina, I. 243.
Meloë proscarabaeus, on beet in N. Carolina, I. 485.
Melolontha (Cockchafer), II. 123; on onions in France, II. 542; attacks of, compared with those of *Dasychira pudibunda* in Holland, III. 196; bionomics and control of, in Russia, I. 538, II. 10, 11, 12, 13, 37, 200, 304, 305, 366, 514, 524, 692, 699, III. 93, 104, 119, 214, 343, 394, 477, 602, 607, 728; in forests in Sweden, III. 66.
Melolontha afflicta, in orchards in Turkestan, II. 714, III. 603.
Melolontha clypeata, in Turkestan, III. 603.
Melolontha hippocastani, bionomics and control of, in Russia, I. 493, 526, II. 11, 12, 110, 172, 260, 442, 465, 523, 640, III. 67, 76, 228, 337, 398, 399, 402, 481, 540, 544, 603; food-plants of, in Scotland, III. 715.
Melolontha melolontha, on asparagus, in Argentina, II. 593; bionomics of, in Bukovina, II. 640; on forest trees and apple in England, I. 464, II. 563, III. 659; on lettuce and flax in France, I. 504, III. 428; on everlasting pea in Holland, III. 198; on vines, etc., in Italy, III. 112, 124; bionomics and control of, in Russia, I. 395, 536, II. 43, 110, 172, 331, 442, 463, 465, 502, 523, 614, 719, III. 14, 50, 76, 206, 225, 226, 228, 337, 391, 394, 396, 402, 443, 601, 603, 606; *Coccobacillus* infections in, I. 336; specific characters of, III. 337.
Melolontha vulgaris (see *M. melolontha*).
Melon (*Cucumis melo*), II. 64; not attacked by *Phlyctaenodes sticticalis* in Astrachan, III. 700; pests of, in Baluchistan, II. 426; *Aleurodes vaporariorum* on, in England, III. 285; pests of, in France, I. 123; *Dacus bipartitus* on, in Gold Coast, II. 672; *Dacus brevistylus* on, in India, III. 27; *Hemichionaspis minor* on, in Peru, I. 323; *Diabrotica* spp. on, in Porto Rico, III. 476; pests of, in Russia, I. 362, 460, 487, 493, 526, 535, II. 34, 43, 53, 54, 312, 488, 718, III. 152, 219, 221, 227, 486; *Tetranychus altheae* on, in Sweden, III. 253; pests of, in U.S.A., I. 180, 219, 299, 418, 419, II. 120, 159, 161, 246, 465, III. 192, 370, 471.
Melon Aphis (see *Aphis gossypii*).
Melon Beetle (see *Aulacophora femoralis*).
Melon Fly (see *Carpomyia pardalina* and *Dacus cucurbitae*).
Melon Worm (see *Diaphania hyalinata*).
Melospiza melodia, insect food of nestlings of, I. 305.
membranaceus, Brachytrypes ; *Leptoglossus.*
Memnia vicina, on vanilla in Madagascar, III. 57.
memnon, Papilio.
menapia, Neophasia.
mendax, Aristotelia ; *Lygidea.*
mendica, Diacrisia.
mendicus, Conorrhynchus (*Cleonus, Temnorrhinus*).
mendosa, Dasychira.
Mendoza Moth Borer, on cactus in Argentina, III. 126.
Menesta albiciliella, on blackberry in U.S.A., III. 463.
menetriesi, Carabus.
Menetypus variegatus, on cotton in Peru, III. 273.
Menida histrio, on rice, etc., in S. India, II. 69.
Meniscus bilineatus, parasite of *Aegeria* (*Bembecia*) *hylaeiformis* in France, II. 622.
Mentha arvensis, Eriosoma pallidum on, in Holland, III. 200.
Mentzelia, Macrosiphum mentzeliae, sp. n., on, in Oregon, III. 588.
mentzeliae, Macrosiphum.
Meraporus crassicornis, sp. n., parasite of *Mayetiola destructor* in Russia, II. 65, 66.
mercki, Hyperaspis.
Mercury Chloride, against *Lepisma saccharina*, III. 714; ineffective against *Phthorimaea operculella*, I. 377.
Mercury Perchloride, against termites, II. 268, III. 379.
merdaria, Scatophaga.

merdarius, Henicospilus.
merdigera, Crioceris.
meridianus, Epepeotes.
meridionalis, Achrysocharis formosa; *Elachertus.*
Merisus destructor, parasite of *Mayetiola destructor*, I. 528, II. 65, 225, III. 416.
Merisus intermedius (see *M. destructor*).
Mermis, parasite of *Helopeltis theivora* in India, I. 370; parasite of *Bothynoderes punctiventris* in Russia, II. 179; parasite of frog-hoppers in Trinidad, II. 62; parasite of *Cydia pomonella* in U.S.A., III. 476; parasite of *Oecanthus* in U.S.A., II. 674; parasite of locusts, I. 544, II. 126, 718.
Merodon equestris (Large Narcissus Fly), on narcissus in Canada and U.S.A., I. 47, II. 677, III. 589; on narcissus etc. in Europe, I. 386, II. 88, 246, 345, III. 742; geographical distribution of, II. 246.
Meromyza, on wheat in Manitoba, III. 70.
Meromyza americana, bionomics of, in U.S.A., III. 300, 708.
Meromyza saltatrix, on crops in Russia, II. 172.
Merops americanus, destroying locusts in the Philippines, I. 68.
Merops philippinus, destroying locusts in the Philippines, I. 68.
Merothrips fusciceps, sp. n., on Oriental bamboos in Florida and Louisiana, III. 631.
Mesocerus marginatus (see *Syromastis*).
Mesochorus, parasite of *Phlyctaenodes sticticalis* in Russia, I. 535.
Mesochorus agilis, parasite of *Phlyctaenodes sticticalis* in U.S.A., I. 42.
Mesochorus dilutus, parasite of *Eucosma ocellana* in Europe, III. 584.
Mesochorus diversicolor, parasite of *Tortrix fumiferana* in Maine, I. 202.
Mesochorus vitreus, parasite of *Cirphis unipuncta* in U.S.A., III. 553.
Mesogramma polita, bionomics of, in New Jersey, III. 568.
mesograptae, Syrphophagus.
Mesoleius (*Tryphon*) *armillatorius*, parasite of *Pteronus ribesii* in France, II. 622.
Mesoleius aulicus, parasite of *Lygaeonematus erichsoni* in Britain, I. 119, II. 54.
Mesoleius bipunctatus, parasite of *Pteronus ribesii* in France, II. 622.
Mesoleius grossulariae, parasite of *Pteronus ribesii* in France, II. 622.
Mesoleius tenthredinis, parasite of *Lygaeonematus erichsoni*, I. 401, 406, III. 43, 79.
Mesosa curculionoides (see *Haplocnema*).
Mesostenoideus, parasite of *Diatraea* spp. in Br. Guiana, I. 521, II. 568, III. 384.
Mesostenus gracilis, parasite of *Euzophera semifuneralis* in U.S.A., III. 655.
Mesostenus thoracicus, parasite of *Euzophera semifuneralis* in U.S.A., III. 655.
Mespilus, Cryptoblabes gnidiella on in Egypt, II. 505, 506.
Mespilus germanica (see Medlar).
Mesquite (see *Prosopis juliflora*).
messor, Calliephialtes.
messoria, Chlorops; *Euxoa.*
Mesua ferrea, scale-insects on, in Ceylon, III. 168.
mesuae. Parlatoria.
Metachaeta helymus, parasite of *Cirphis unipuncta* in U.S.A., III. 423.
Metadrepana glauca, on coffee in Nigeria, III. 166; on coffee in Uganda, II. 591, III. 752.
metallica, Rhyacionia (*Evetria*); *Harrisina*; *Melisomimas.*
metallicus, Omphale.
Metallonoidea britannica, sp. n., parasite of *Lepidosaphes ulmi* in England, III. 724.
Metallus bethunei, sp. n., on blackberries in Ontario, III. 77.
Metallus rubi (Blackberry Leaf-miner), in Ontario, I. 405.
Metamasius hemipterus, on sugar-cane and coconut in Br. Guiana, I. 139, 522, II. 58, 569; on sugar-cane in the West Indies, I. 185, 285, II. 49.
Metamasius hemipterus var. *decoloratus*, on sugar-cane in Trinidad and Barbados, II. 31.
Metamasius obsoletus, associated with *Rhynchophorus palmarum* in Trinidad, I. 285.
Metamasius sericeus, on sugar-cane and coconut in West Indies, II. 88, III. 650.
Metapelma spectabilis, parasite of *Agrilus hastifer* in Russia, III. 228.
Metapodius instabilis, parasitised by *Trichopoda*, III. 248.
Metapodius terminalis, parasitised by *Trichopoda*, III. 248.

Metarrhizium, infesting *Bothynoderes punctiventris*, I. **485, 489,** II. **179**; infesting *Euxoa segetum* and *Feltia exclamationis* in Russia, II. **212**; unsuitable for controlling insects in a dry climate, II. **105.**

Metarrhizium (*Penicillium*) *anisopliae* (Green Muscardine Fungus), imported into Ceylon against *Oryctes rhinoceros*, III. **754**; experiments with *Lepidiota rothei* and, in Queensland, III. **409, 560**; infesting beetles in Russia, II. **179, 260**; infesting wireworms in U.S.A., III. **300**; infesting froghoppers and beetles in West Indies, I. **268, 389,** II. **28, 31, 48, 49, 61, 62, 70, 145, 532, 646,** III. **14, 207, 680**; infesting *Arctia caja*, III. **403**; parasite of *Tomaspis postica* in Mexico, I. **184.**

meteori, *Dibrachys*; *Eupelmus.*

Meteorological conditions, influence of, on insects, I. **316, 382, 466, 477,** II. **16, 126, 154, 178, 184, 301, 310, 469, 607, 640, 649, 650, 697,** III. **189, 210, 254, 308, 309, 324, 572.**

Meteorus, parasite of *Scotogramma* (*Mamestra*) *trifolii* in Colorado, I. **352**; parasite of *Oncideres putator* in U.S.A., III. **475**; parasite of *Polychrosis viteana* in U.S.A., I. **113,** I. **457.**

Meteorus albiditarsis, parasite of *Taeniocampa* spp. in Britain, II. **270.**

Meteorus archipsidis, parasite of *Cacoecia* (*Archips*) *argyrospila* in U.S.A., I. **226.**

Meteorus atrator, parasite of *Tinea biselliella* in Britain, II. **270.**

Meteorus communis, parasite of *Cirphis unipuncta* in U.S.A., III. **553.**

Meteorus ictericus, parasite of Tortricids in Britain, II. **270.**

Meteorus laeviventris, parasite of *Tortrix viridana* in Britain, II. **620.**

Meteorus laphygmae, parasite of *Cirphis* in Texas, III. **684.**

Meteorus trachynotus, parasite of *Tortrix fumiferana* in Canada, I. **202.**

Meteorus versicolor, parasite of *Lymantria dispar* and *Euproctis chrysorrhoea* in U.S.A., I. **270,** II. **136, 295, 394, 710,** III. **330, 507.**

Methyl Salicylate, as an insecticide, III. **284.**

Methylated Spirit, in spray against Aphids, II. **234, 410**; in sprays against vine moths, II. **182, 336, 412.**

meticulosa, *Phlogophora.*

meticulosalis, *Terastia.*

Metisa sierricola, on cacao, etc., in Nigeria, III. **165, 663.**

Metoecis carnifex, in nests of *Anaphe* and *Hypsoides* in Africa, II. **530.**

Metopia tincta, parasite of *Hyponomeuta malinellus* in Russia, I. **347.**

Metopius discolor, parasite of *Prodenia litura* in Nigeria, II. **107.**

Metopodontus cinctus, on *Castilloa elastica* in Kamerun, II. **414**; on coconut in South Sea Islands, II. **2.**

Metopodontus savagei, on *Castilloa elastica* in Kamerun, II. **414.**

Metriocharis atrocyanea, sp. n., parasite of *Dacus oleae* in Eritrea, III. **173, 432.**

Metriocharis viridis, sp. n., parasite of *Dacus oleae* in Eritrea, III. **173, 432.**

Metrosideros, *Pseudococcus* intercepted on, in U.S.A., III. **117, 469.**

Metzneria lappella (*Parasia aestivella*), on *Arctium minus* in Canada, III. **72**; on Jerusalem artichoke, III. **33.**

Mexican Cotton-boll Weevil (see *Anthonomus grandis*).

Mexican Fruit Fly (see *Anastrepha ludens*).

Mexican Orange Maggot (see *Anastrepha ludens*).

Mexico, beneficial parasites in, II. **317,** III. **26**; *Castolus plagiaticollis* predaceous on froghoppers in, II. **31, 62**; citrus pests in, II. **77,** III. **420**; insect pests from, imported into U.S.A., II. **461,** III. **455, 558, 623, 690, 739**; miscellaneous pests in, I. **226, 327, 351, 431, 436,** II. **62, 92, 138, 189, 307, 461, 649,** III. **2, 475, 509, 510**; original home of cochineal insect, I. **315**; pests of sugar-cane in, I. **103, 183.**

mi, *Euclidia.*

micacea, *Hydroecia.*

micans, *Dendroctonus*; *Eudipnus*; *Helops*; *Pachyneuron.*

Michigan, experiments with insecticides in, I. **176,** II. **457, 459**; legislation against diseases of bees in, II. **418**; miscellaneous pests in, I. **40, 77, 298,** II. **244,** III. **57, 115, 140, 297, 370.**

Microbracon, parasite of *Hoplocampa cookei* in U.S.A., I. **178.**

Microbracon coleophorae, sp. n., parasite of *Coleophora leucochrysella* in U.S.A., III. **658.**

Microbracon dorsator, parasite of *Polychrosis viteana* in U.S.A., I. **113.**

Microbracon mellitor, parasite of *Anthonomus grandis* and *Polychrosis viteana* in U.S.A., I. **113**, II. **426**.
Microbracon vestiticida, parasite of *Anthonomus vestitus* in Peru, I. **316**.
Microcentrum rhombifolium (see *Orophus*).
Microcera (White-fringed Fungus), infesting whiteflies in Florida, I. **267**, III. **23**, **325**; infesting *Aulacaspis pentagona* in the Seychelles, I. **129**; (see also *Fusarium*).
Microcerotermes heimi, destroying timber in Bombay, I. **525**.
Micrococcus, infesting *Lachnosterna* in U.S.A., II. **639**.
Micrococcus nigrofaciens, infesting *Lachnosterna* in U.S.A., III. **517**, **584**.
microcribraria, Lecaniodiaspis.
Microcryptus nigrocinctus, parasite of vine-moths in Russia, III. **211**; parasite of *Polychrosis botrana* in Tyrol, III. **497**.
Microdontomerus anthonomi, parasite of *Anthonomus grandis* in U.S.A., III. **425**.
Microdus, parasite of *Epinotia piceafoliana* in Maine, I. **200**.
Microdus carinoides, parasite of *Eucosma ocellana* in U.S.A., III. **584**.
Microdus inedius, parasite of *Scotogramma* (*Mamestra*) *trifolii* in U.S.A., I. **352**.
Microdus laticinctus, parasite of *Eucosma ocellana* in U.S.A., III. **584**.
Microdus ocellanae, parasite of *Eucosma ocellana* in Canada, I. **339**.
Microdus pumilus, parasite of *Coleophora laricella* in Europe, I. **63**.
Microdus rufipes, parasite of *Eucosma ocellana* in Europe, III. **584**.
Microgaster, parasite of *Depressaria apicella* (*nervosa*) in Germany, I. **515**; parasite of *Erinnyis ello* in Trinidad, III. **367**.
Microgaster anthomyiarum, parasite of *Chortophila brassicae* in Europe, III. **1**.
Microgaster perlae, parasite of *Chrysopa*, II. **91**.
Microgaster perspicuus (see *Apanteles congestus*).
Microgaster rufiventris, parasite of *Abraxas grossulariata* in France, II. **622**.
Microklossia prima, infesting *Phlyctaenodes sticticalis* in Astrachan, III. **701**.
Micromelus pyrrhogaster (see *M. rufomaculatus*).
Micromelus rufomaculatus, hyperparasite of *Mayetiola destructor* in Russia, II. **66**.
Micromelus subapterus (see *M. rufomaculatus*).
Micromus timidus, predaceous on *Aphis gossypii* in Nigeria, III. **164**.
Microperrisia pulvinariae, sp.n., parasite of *Pulvinaria* in Manila, III. **725**.
Microphthalma disjuncta, parasite of *Anisoplia austriaca*, etc., in Russia, II. **260**.
Microplites rufiventris, parasite of *Laphygma exigua* in Turkestan, II. **515**.
Microplites tuberculifera, parasite of *Polychrosis botrana* in Tyrol, III. **497**.
Microsporidium bombycis, causing wilt disease in gipsy moth, II. **102**.
Microsporidium polyhedricum, infesting *Prodenia litura* in Egypt, II. **105**; infesting *Gelechia gossypiella*, II. **596**; infesting silkworms, III. **146**; diagnosis of, in insects, II. **528**, III. **356**.
Microtermes anandi (see *M. obesi*).
Microtermes obesi, destroying timber in India, I. **525**, III. **146**.
Microterys flavus, parasite of *Coccus hesperidum* in California, I. **309**; imported into Hawaii, III. **757**.
Microtrombidium locustarum (see *Trombidium*).
Microtypus sacharovi, parasite of *Phlyctaenodes sticticalis* in Russia, I. **535**, III. **220**.
Microweisea (*Pentilia*, *Smilea*) *misella*, predaceous on scale-insects in U.S.A., I. **101**, **323**, **511**, II. **165**, **217**, III. **131**, **192**, **417**; predaceous on *Tetranychus telarius* in U.S.A., III. **64**.
migrator, Eulophus.
migratoria, Locusta (*Pachytylus*).
migratorius, Planesticus.
migratoroides, Locusta (*Pachytylus*).
Migratory Apple Aphid (see *Aphis fitchii*).
miki, Asphondylia.
milbertii, Proctacanthus.
Mildew (*Plasmopora viticola*), on vines in Bessarabia, III. **395**; control of, III. **519**, **556**, **562**.
Milfoil, attractive to *Anthrenus scrophulariae* in U.S.A., III. **184**.
miliaris, Aspidomorpha; *Aularches*.
miliaris-longum, Asterolecanium.
militaris, Acanthotermes; *Apanteles*; *Calotermes*.

Military Grasshopper (see *Taeniopoda picticornis*).
Milkweed, Common (see *Asclepias*).
Milkweed Caterpillar (see *Anosia plexippus*).
milleri, Recurvaria.
Millet (*Panicum miliaceum, Sorghum vulgare*), *Sesamia vuteria* on, in Algeria, I. **43**; *Mocis* (*Remigia*) *repanda* on, in Brazil, II. **627**; pests of, in the Far East, II. **489, 490**; *Pyrausta nubilalis* on, in Europe and Egypt, I. **409, 501**; *Busseola fusca* on, in Nyasaland and Zanzibar, II. **277**, III. **125**; pests of, in Portugal, I. **313**; *Dichocrocis punctiferalis* on, in Queensland, II. **20**; *Laphygma exempta* on, in Rhodesia, III. **359**; not attacked by *Oria musculosa* in Russia, II. **392**, III. **5**; pests of, in Russia, I. **447, 459, 530**, II. **5**, III. **45, 46, 205, 487, 543, 544**; pests of, in U.S.A., I. **53**, II. **120**, III. **18, 370, 471, 509**; Aphids on, I. **460**, II. **153, 273, 396, 630, 631**, III. **45**; sown as a trap crop against *Lixus ascanii* in Russia, II. **375**; (see Sorghum).
Millet Aphis (see *Aphis sorghi*).
milleti, Hypsoides.
Millipedes, I. **49**, II. **116, 159, 326, 363, 564.**
Milvulus tyrannus, destroying froghoppers in Trinidad, II. **62.**
Milyas cinctus, destroying *Blissus leucoptera* in U.S.A., II. **227.**
Mimetus setulosus, on apples in Br. Columbia, I. **90.**
Mimopacha gerstaeckeri, in Uganda, I. **33.**
Mimorista flavidissimalis, recommended to be introduced into Queensland to destroy cactus, III. **126**; on cactus in U.S.A., I. **80.**
Mimosa, Zygothrips bicolor on, in Florida and Louisiana, III. **631**; *Ceroplastes* on, in Peru, III. **135**; *Ceratoneura pretiosa* on, in Texas, III. **151.**
Mimosa lindheimeri, Oncideres putator on, in U.S.A., III. **475.**
Mina lobata, Orthezia insignis on, in East Africa, II. **429.**
Mindarus abietinus, on *Abies pectinata* in Hungary, II. **124**; on spruce in New York, III. **474**; on shade trees in Quebec, III. **585.**
Mineola (*Phycis*) *indiginella* (Apple Leaf-roller), on apples in Missouri, I. **281**, III. **180.**
Mineola indiginella var. *nebulella*, parasitised by *Secodella acrobasis*, sp. n., in America, III. **691.**
Mineola vaccinii (Cranberry Fruit Worm), bionomics of, in U.S.A., III. **531, 532.**
minians, Nephelodes (see *N. emmedonia*).
minima, Arbela.
minimum, Monomorium.
minimus, Dicyphus.
miniosa, Taeniocampa.
ministra, Datana.
Minnesota, Acridiidae of, III. **160, 735**; forest pests in, II. **162**; insect pests on imported plants in, III. **161**; miscellaneous pests in, I. **429**, II. **693**, III. **331, 350, 546, 586**; useful birds in, III. **161.**
minor, Bothriothorax; *Chrysomphalus*; *Euproctis*; *Hemichionaspis*; *Myelophilus.*
minorana, Cnephasia.
Mint, essence of, against vine pests, III. **211.**
minuta, Allotria; *Teras.*
minutana, Enarmonia (*Grapholitha, Steganoptycha*).
minutissimus, Prophanurus (*Telenomus*).
minutulus, Cryptus.
minutum, Trichogramma (*Pentarthron*).
minutus, Dinoderus; *Enicmus*; *Limonius*; *Nysius*; *Polygnotus*; *Rhynchites* (see *R. aeneovirens*).
mirabilis, Kermes.
Miranda acalypha, destroying bees in Russia, II. **65.**
Miraria, on grain in Russia, II. **171.**
Miresa, on coffee in German East Africa, I. **106, 414.**
miriformis, Myrmus.
Miris ferrugatus, on hay in Russia, III. **479.**
Mirotermes marshalli, on sugarcane in St. Kitts, II. **284.**
mirus, Diapus.
Miscible Oil, against Aphids, III. **363**; against *Cacoecia argyrospila*, I. **226**, II. **15**, III. **414, 446**; against scale-insects, II. **119**, III. **182, 328, 417**; against whiteflies, III. **23, 688**; disadvantages of, II. **6**; formula for, III. **529**; ineffective against *Psylla pyri*, II. **673**; use of, in sprays, I. **474.**
misella, Microweisia (*Pentilia, Smilia*).
miser, Eulophus.
misippus, Hypolimnas.
Misospatha (*Rhopalomyia*) *hypogaea*, on chrysanthemum in U.S.A., III. **454.**

Missel Thrush, an injurious bird in England, I. **305**; destroying *Tortrix murinana* in Germany, II. **148**.
Mississippi, effect of *Anthonomus grandis* on yield of cotton in, I. **186**, II. **650**; miscellaneous pests in, I. **455**, II. **252**, **464**, III. **151**, **297**, **333**, **472**, **581**, **586**.
Missouri, entomological work in, III. **87**; fruit pests and their control in, I. **182**, **280**, **322**, II. **281**, III. **179**, **513**; *Homoporus subapterus* parasite of *Mayetiola destructor* in, I. **528**; horticultural quarantine regulations in, I. **269**; insect pests from, imported into California, III. **420**, **558**; miscellaneous pests in, I. **40**, **77**, **429**, **430**, III. **141**, **447**, **450**, **569**, **577**.
Mistletoe (see *Loranthus*).
Misumena tricuspidata, destroying bees in Russia, II. **64**.
Misumena vatia (*Thomisus citraeus*), destroying bees in Russia, II. **64**.
mite, Elaphidion.
Mites, on tea in Ceylon, II. **643**; injurious and beneficial, in Egypt, II. **505**; harmful to cultivated plants in France, II. **270**; causing galls on aloes in South Africa, II. **652**; measures against, in flour and grain, II. **503**; (see *Bryobia*, *Eriophyes*, *Tetranychus*, etc.).
mitratus, Exochus.
mitterbacheriana, Ancylis.
mixta, Gargara.
Mlanje Cypress (*Widdringtonia whytei*), *Pachytoma gigantea* on, in Nyasaland, II. **277**.
Mnemonica auricyanea, bionomics of, in U.S.A., III. **18**, **249**.
mnemonicae, Sympherta.
Mocis (*Remigia*), parasitised by *Trichogramma minutum* (*pretiosum*) in Sumatra, I. **13**, III. **645**.
Mocis (*Chalciope*) *frugalis*, on rice and sugar-cane in Far East, II. **489**; on rice in South India, II. **68**.
Mocis (*Remigia*) *repanda* (Grass Moth), food-plants of, in Brazil, II. **627**; bionomics of, on sugar-cane, etc., in Br. Guiana, I. **521**, II. **58**, **519**, **568**; on Italian rye-grass in Florida, III. **327**; bionomics of, on sugar-cane in West Indies, I. **181**, **184**, II. **49**, **495**, **574**, III. **556**.
Mocis (*Chalciope*) *undata* (*Remigia archesia*), on sugar-cane in Far East, II. **490**; parasitised by *Trichogramma minutum* (*pretiosum*) in Java, III. **203**.
Mock Orange (*Murraya exotica*), *Ceratitis capitata* on, in Hawaii, I. **374**.
moderator, Thersilochus.
modesta, Paralipsa.
modestus, Neotetranychus; *Podisus*.
Moecha adusta, on cacao in the Belgian Congo, I. **22**.
Moechotypa verrucicollis, on rubber in Ceylon, II. **191**.
Moerophora neoclyti, sp. n., parasite of *Neoclytis capraea* [?] in U.S.A., III. **658**.
moestus, Lygaeonematus (*Nematus*) (see *L. brevicornis*).
Molasses, in baits and sprays against insect pests, I. **10**, **273**, **287**, **310**, **416**, **419**, **463**, **479**, **484**, **490**, II. **34**, **63**, **65**, **92**, **96**, **97**, **233**, **248**, **258**, **314**, **315**, **336**, **342**, **359**, **361**, **448**, **458**, **468**, **469**, **470**, **478**, **480**, **495**, **509**, **523**, **533**, **560**, **588**, **606**, **613**, **627**, **638**, **647**, **657**, **679**, **680**, **700**, III. **19**, **29**, **36**, **68**, **138**, **205**, **232**, **382**, **567**, **592**, **605**, **608**, **635**, **639**.
Mole-cricket (see *Gryllotalpa* and *Scapteriscus*).
Moles, destroying insects, I. **464**, II. **27**, **453**, III. **7**, **407**.
molesta, Solenopsis.
Molinas Solution, against carnation pests, II. **363**, III. **14**.
molitor, Tenebrio.
mollipes, Draeculacephala.
mollis, Ernobius; *Opilo*.
molokaiensis, Sierola.
Molothrus atronitens, damaging rice in Trinidad, II. **574**.
Mometa zemiodes, on cotton in West Africa, III. **164**, **168**.
Momordica, Dacus bipartitus on, in the Gold Coast, II. **672**.
momordicae, Dacus (*Tridacus*).
monacha, Apate; *Corythaica*; *Lymantria*(*Liparis*,*Ocneria*,*Psilura*).
Monacrostichus citricola, on wild oranges in the Philippines, II. **116**.
Monacrostichus crabroniformis, sp.n., in India, III. **27**.
Monarthropalpus buxi (Box-wood Leaf-miner), control of, I. **74**; on box in Holland, I. **386**; control of, on box in U.S.A., II. **361**, III. **350**, **459**, **589**, **624**.
Moneilema, on cactus in U.S.A., I. **79**; recommended to be introduced into Queensland to destroy cactus, III. **126**.
Monellia californica, on walnut in California, III. **141**.
Monellia caryae (American Walnut Aphis), on walnut in California, III. **141**.

Monellia caryella (Little Hickory Aphis), on *Juglans californica* in California, II. **251**, III. **141**.
Monilia candida, associated with *Xyleborus dispar*, I. **260**, III. **393**.
Monilia cinerea, associated with attacks of *Cydia funebrana*, II. **291**.
Monilia fructigena, control of, on apples in Russia, III. **204**, **391**, **534**; associated with attacks of *Cydia funebrana*, II. **291**.
Monkey Puzzle (see *Araucaria bidwilli*).
monoceros, *Notoxus*; *Oryctes*.
Monochamus (*Monohammus*), on coconuts in South Sea Islands, II. **2**; on *Pinus echinatus* in U.S.A., III. **725**.
Monochamus fistulator (see *Dihammus*).
Monochamus galloprovincialis, in Russia, III. **342**.
Monochamus guttatus, in Russia, III. **342**.
Monochamus impluviatus, in Russia, III. **342**.
Monochamus pistor, in Siberia, II. **222**.
Monochamus quadrimaculatus, in Russia, III. **342**.
Monochamus ruspator, on *Funtumia elastica* in Africa, II. **415**.
Monochamus rusticator, on cacao in Samoa, II. **555**.
Monochamus saltuarius, in Siberia, II. **222**, III. **342**.
Monochamus sartor, in Siberia, II. **222**.
Monochamus scutellatus, on pines in Canada, I. **407**, III. **43**.
Monochamus sutor, in Russia, III. **342**.
Monochoria hastata, *Prodenia litura* on, in the Philippines, I. **482**.
Monocrepidius auritus, in U.S.A., III. **300**.
Monocrepidius bellus, in U.S.A., III. **300**.
Monocrepidius lividus, in U.S.A., III. **300**.
Monocrepidius vespertinus, bionomics of, in U.S.A., III. **299**, **300**, **465**, **693**, **709**.
Monodes agrotina, on sugar-cane in Br. Guiana, I. **521**, II. **58**.
monodon, *Notoxus*; *Pentodon*; *Termes*.
Monodontomerus aereus, parasite of *Hyphantria cunea* in Canada, I. **402**; parasite of *Euproctis chrysorrhoea* in U.S.A., I. **141**, **270**, II. **343**.
Monodontomerus obsoletus, parasite of *Polychrosis botrana* in Tyrol, III. **497**.
Monodontomerus virens, hyperparasite of *Dendrolimus pini* in Russia, II. **222**.
monoglypha, *Parastichtis*.
Monohammus (see *Monochamus*).
Monolexis lavagnei, parasite of *Sinoxylon sexdentatum* in France, II. **9**, III. **10**.
Monomorium, destroying froghoppers in Trinidad, II. **62**.
Monomorium floricola, in stored food in St. Vincent, III. **412**.
Monomorium indicum, attacking *Recaredus* in India, III. **322**.
Monomorium minimum, destroying *Blissus leucoptera* in U.S.A., II. **227**.
Monomorium pharaonis, in stored food in St. Vincent, III. **412**; in houses in Scotland, III. **715**.
Monophadnoides rubi (see *Monophadnus*).
Monophadnus elongatulus, on roses in France, I. **480**; on roses in Russia, II. **613**.
Monophadnus rubi (Raspberry Sawfly), in Canada, I. **168**, III. **552**.
Monophlebus, on mango in India, remedies against, II. **427**.
Monophlebus dalbergiae, on citrus in India, I. **279**.
Monophlebus stebbingi var. *octocaudatus*, on mango, etc., in India, II. **339**.
monostigma, *Scirpophaga*.
Monosteira inermis, on cotton in Russia, II. **313**, **314**.
Monosteira unicostata, on poplars in Russia, I. **461**.
Monotes kerstingii, *Sylepta* on, in Togo, I. **350**.
Montana, bionomics of *Vespamima sequoia* in forests in, II. **645**; legislation against insect pests in, II. **294**; miscellaneous pests in, I. **515**, II. **4**, **251**, **380**, **386**, **536**, **623**, III. **113**, **334**, **457**, **466**; regulations regarding fungicides and insecticides in, II. **559**, **562**.
montana, *Chermes*; *Chalchophora angulicollis*; *Formica*; *Ochrophora*.
Montandoniella dacica, on fruit trees in Russia, III. **45**.
montanus, *Liothrips*; *Pachynematus*.
montemartinii, *Chaitophorus*.
Montenegro, cultivation of *Pyrethrum cinerariaefolium* in, I. **230**.
Monterey Cypress (*Cupressus macrocarpa*), *Pseudococcus cupressi* on, in California, II. **435**.
monticella, *Stenaphis*.
monticola, *Chaetogaedia*.
monticolae, *Dendroctonus*.
montrouzieri, *Cryptolaemus*.

Montserrat, cotton and other pests in, I. 328, 329, II. 87; pests of sugar-cane in, I. 165, II. 284, 603, 693.
monuste, Pieris.
moorei, Hypocala.
Mopani Tree (see *Copaifera mopani*).
Mordella aculeata, on chicory in France, I. 255.
Mordella leucospila, on cotton in Bismarck Archipelago, I. 349.
mordwilkiana, Aphis.
Mordwilkoja vagabunda, on poplars in Colorado, II. 343.
Morganella maskelli, intercepted on citrus fruit in California, III. 121, 455, 626, 690, 739.
mori, Bombyx.
Morimus funereus, on figs in France, III. 11.
Morimus tristis (see *M. funereus*).
Morinda citrifolia, not attacked by *Ceratitis capitata* in Hawaii I., 511.
morio, Acheta; *Eutermes* (*Termes*); *Podonta*; *Selandria*; *Stenobothrus* (see *Stauroderus scalaris*).
Mormidea baccarum, parasites of, in Russia, I. 448, 449.
Mormidea ypsilon, on rice in Br. Guiana, II. 568.
Mormonia sponsa, trapped with molasses in Russia, III. 639.
morrilli, Cosmocomoidea; *Palaeococcus.*
morrisi, Fiorinia (see *Leucaspis gigas*).
morstatti, Ceratitis; *Xyleborus.*
mortana, Rhyacionia (*Evetria*).
mortisaga, Blaps.
morulus, Corymbites.
Morus (see Mulberry).
Morus alba, Prodenia litura on, in the Philippines, I. 482.
Morus nigra, not attacked by *Ceratitis capitata* in Hawaii, I. 511.
Mosaic Disease of Tobacco, list of plants attacked by, I. 19.
moschata, Aromia.
moschatae, Stephanoderes.
mosellana, Sitodiplosis.
Mosquitos, *Entomophthora* spp. infesting, II. 377; in bait-traps for *Ceratitis capitata*, III. 568.
Mosquito Blight (see *Helopeltis*).
Moss, *Ripersia globata* on, in New Zealand, III. 721.
Moss, Iceland (*Fucus caragahen, Citaria islandica*), decoction of, against insect pests, II. 335, III. 394.
Moss, Spanish, restrictions upon removal of, in Georgia, II. 92.
Motacilla alba, destroying *Hypera variabilis* in Turkestan, II. 39.
Motacilla campestris, destroying *Anaphe* in Africa, II. 548.
Motacilla feldegii, destroying *Hypera variabilis* in Turkestan, II. 39.
Moth Borer, Large (see *Castnia licus*).
Moth Borers, Small (see *Diatraea canella* and *D. saccharalis*).
Moth Stalk-borer (see *Diatraea saccharalis*).
Motherwort (*Leonurus cardiaca*), *Eurydema oleracea* on, in Russia, III. 7.
Mottled Umber Moth (see *Hybernia defoliaria*).
Mountain Apple, *Ceratitis capitata* on, in Hawaii, I. 374.
Mountain Ash (see Ash, Mountain).
Mountain Balm (*Eriodictyon californicum*), *Pseudococcus yerbasantae* on, in California, I. 307, II. 436.
Mountain Holly (see *Heteromeles arbutifolia*).
Mountain Laurel (see *Kalmia latifolia*).
Mountain Maple (see Maple, Mountain).
Mountain Pine Beetle (see *Dendroctonus monticolae*).
Moutouc (see *Lachnosterna*).
Mucor exitiosus, infesting *Cyrtacanthacris* (*Acridium*) *septemfasciata* in Réunion, II. 216.
Mudar Plant (see *Calotropis procera*).
Muhlenbeckia adpressa, Cardiococcus fossilis on, in Australia, III. 652.
Muhlenbeckia australis, Lecanium armatum on, in New Zealand, III. 721.
Muhlenbergia, not attacked by *Aphis avenae*, II. 696.
Mulberry (*Morus alba*), *Aulacaspis pentagona* on, in Argentina, II. 477; Coccidae on, in Australia, III. 653; pests of, in France, II. 196, III. 10; *Tetranychus bioculatus* on, in India, I. 508; pests of, in Italy, I. 147, II. 128, 402, 441, 592, III. 80; pests of, in Japan, I. 520, III. 80; free from insect pests in Mississippi, II. 465; *Prodenia litura* on, in the Philippines, I. 482; pests of, in Russia and Turkestan, II. 636, III. 225; *Stictococcus dimorphus* on, in Uganda, III. 288; not attacked by *Lymantria dispar* in U.S.A., III. 669; pests of, in U.S.A., I. 281, II. 543, III. 559, 654; scale-insects on, I. 89, 147, II. 128, 402, 441, 477, 543, 592, III. 6, 80, 288, 653; food-plant of *Aulacaspis pentagona*, I. 222.

Mulberry Scale (see *Aulacaspis pentagona*).
Mulberry Tree Borer (see *Apriona rugicollis*).
Mulga, *Lepidosaphes mulgae* on, in Australia, II. **705.**
mulgae, Lepidosaphes.
Mullein (see *Verbascum*).
multicinctus, Ichneumon.
multilinea, Cirphis.
multilineatum, Zagrammosoma.
multiporum, Asterolecanium styphelioe.
multipunctellus, Hyponomeuta.
multispinosus, Rhizococcus.
munda, Cycloneda; Psilocephala.
mungonis, Pachytychius.
Muratori Sprayer, use of, against vine pests, III. **614.**
Murgantia histrionica (Harlequin Cabbage Bug), bionomics and control of, in U.S.A., I. **126, 476,** II. **465,** III. **328, 373, 471, 511, 709.**
muricata, Tmethis (*Eremobia*).
muricatum, Sinoxylon (*Apate*) (see *S. perforans*).
murina, Hypera.
murinana, Tortrix.
murinus, Brachylacon (*Lacon*).
Murraya exotica (Mock Orange), *Ceratitis capitata* on, in Hawaii, I. **374.**
murrayanae, Dendroctonus.
Mus concha, destroying *Chalioides junodi* in South Africa, I. **303.**
Musa, Coccids attacking, in Fiji, III. **548.**
Musa sapientium (see Banana).
musae, Rioxa (*Trypeta*).
muscae, Empusa.
Muscardine Fungus, Green (see *Metarrhizium anisopliae*).
Muscidifurax raptor vorax (in error), propagation of, against stable fly, etc., in Hawaii, III. **289, 412**; parasite of house-fly in South Africa, III. **503.**
Muscina stabulans, in U.S.A., III. **452.**
Muscivora forficata, destroying *Diabrotica duodecimpunctata* in U.S.A., I. **431.**
musculana, Sarrothripus.
musculosa, Oria (*Tapinostola*).
museorum, Anthrenus.
Mushroom Mite (see *Tyroglyphus lintneri*).
Mussel Scale (see *Lepidosaphes ulmi*).
Mussel Scale, Orange (see *Lepidosaphes beckii*).
Mussel Scale, Purple (see *Lepidosaphes beckii*).
Mussidia albipartalis, on mahogany in Nyasaland, II. **340.**
Mussidia melanoneura, on beans in E. Africa, I. **415.**
Mussidia nigrivenella, on maize in Nigeria, III. **166.**
Mustard (*Sinapis arvensis*), *Aphis brassicae* on, in Britain, I. **434**; *Limonius californicus* on, in California, II. **303**; *Chortophila brassicae* on, in France, III. **189**; *Murgantia histrionica* on, in Georgia, III. **471**; *Athalia* on, in E. Africa, I. **246,** II. **283**; indigo sown with, not attacked by *Psylla isitis* in India, II. **687**; *Pieris monuste* on, in Porto Rico, III. **477**; as a trap-crop for *Athalia colibri* (*spinarum*) in Russia, III. **544**; insect pests of, in Russia, I. **536, 537,** II. **355, 356, 357, 358, 648,** III. **67, 112, 172, 212, 220, 401, 439, 443, 481, 536, 543, 637, 700**; not attacked by *Oria musculosa*, II. **319.**
Mustard, Stored, *Tyroglyphus farinae* infesting in Russia, III. **219.**
Mustard, Wild, *Amsinckia intermedia* on, in California, II. **555.**
Mustard, Oil of, preparation of, as an insecticide, II. **336.**
Mustard Beetle (see *Phaedon cochleariae*).
Mustard Blossom Beetles (see *Meligethes*).
mutabilis, Allorrhina; Omorgus; Ootheca.
Muth's Emulsion, against vine-moths, II. **499, 538, 693**; injuring vines, II. **681.**
Mutilla castor, hyperparasite of *Lachnosterna* in Hawaii, III. **681.**
Mutilla ferrugata, hyperparasite of *Lachnosterna* in Hawaii, III. **681.**
mutillatus, Carpophilus.
Mycalesis mineus, on rice in Far East, II. **489.**
mycetophagus, Tyroglyphus.
Mycodiplosis, preying on Coccidae and *Tetranychus*, III. **134.**
Mycodiplosis macgregori, preying on *Tetranychus* in U.S.A., III. **356.**
Mycodiplosis tsugae, III. **356.**
Mycterophallus xanthopus, on coconut in South Sea Islands, II. **2.**
Myelois, Braconid parasites of, II. **426.**
Myelois phoenicis, sp. n., in dates in Algeria and England, III. **762.**
Myelophilus (*Hylastes*) *minor*, in Bohemian forests, II. **720**; in forests in Russia, III. **217, 391, 599, 699.**
Myelophilus (*Hylesinus*) *piniperda* (Pine Beetle), bionomics of, in Britain, I. **388, 464,** II. **498, 661,** III. **677, 715**; in Central Europe, II. **621, 720**; in Germany, II. **326**; on Conifers in New Jersey,

III. 194, 354; on firs in Norway, III. 696; in forests in Russia, III. 217, 391, 599, 699; in Sweden, II. 100.
Myiasis, caused by *Ravinia trivialis*, III. 452.
Myiochares virens, destroying noxious insects in U.S.A., I. 430, II. 525.
Mylabris (*Zonabris*), on cotton in E. Africa, II. 447; on mustard in Russia, I. 537.
Mylabris amplectens, on vegetables in E. Africa, I. 414; on cotton in Nyasaland, II. 277.
Mylabris beckeri, destroying *Dociostaurus maroccanus* in Russia, III. 244.
Mylabris bizonata, on cotton in Africa, II. 2, 579.
Mylabris calida, destroying locusts in Russia, I. 535, II. 53, 474; on mustard in Russia, II. 356.
Mylabris cincta, in egg-clusters of locusts in Russia, II. 475.
Mylabris crocata, in egg-clusters of locusts in Russia, I. 535, II. 475; on mustard in Russia, II. 356.
Mylabris decempunctata, destroying egg-clusters of locusts in Russia, I. 535, II. 475, III. 244; on mustard in Russia, II. 356, III. 638.
Mylabris dejeani, attacking locusts in Russia, I. 535; on mustard in Russia, II. 356.
Mylabris dicincta, on cotton in Nyasaland, II. 277.
Mylabris difurca, on vegetables in E. Africa, I. 246, 414.
Mylabris duodecimpunctata, destroying *Dociostaurus maroccanus* in Russia, III. 244.
Mylabris floralis, on mustard in Russia, II. 356, III. 638; in egg-clusters of locusts in Russia, I. 535, II. 474, III. 243.
Mylabris frollowi, injuring camels in Central Asia, II. 474; in egg-clusters of locusts in Russia, II. 475.
Mylabris fusca, in egg-clusters of *Dociostaurus maroccanus* in Russia, II. 475.
Mylabris geminata, in egg-clusters of *Arcyptera flavicosta* in Russia, II. 475.
Mylabris grisescens (see *M. impar*).
Mylabris impar, attacking locusts in Russia, I. 535; on mustard in Russia, II. 356, III. 638.
Mylabris maculata, on mustard in Astrachan, III. 638.
Mylabris magnoguttata, in egg-clusters of locusts in Russia, II. 475.
Mylabris ocellata, in egg-clusters of locusts in Russia, II. 475.
Mylabris peruanus (see *Bruchus*).
Mylabris quatuorpunctata, destroying locusts in Russia and Siberia, I. 535, II. 474, 509, III. 243, 537; on mustard in Russia, II. 356, III. 638.
Mylabris quatuordecimpunctata, destroying locusts in Russia, I. 535, II. 474, III. 636; on mustard in Russia, II. 356, III. 638.
Mylabris schreiberi, destroying egg-clusters of locusts in Algeria, II. 475, III. 40, 428.
Mylabris sexdecimpunctata, in egg-clusters of *Stauronotus kraussi* in Russia, II. 475.
Mylabris sexmaculata var. *ledereri*, in egg-clusters of locusts in Russia, II. 475.
Mylabris sibirica, destroying locusts in Russia, II. 474.
Mylabris tekkensis, in egg-clusters of *Dociostaurus maroccanus* in Russia, II. 475.
Mylabris tricolor, on cotton in Nyasaland, II. 277.
Mylabris undecimpunctata, II. 475.
Mylabris variabilis, destroying *Calliptamus italicus* in France, III. 40; attacking locusts in Russia, I. 535, II. 474; on mustard in Russia, II. 356.
Mylabris variabilis var. *lacera*, attacking *Dociostaurus maroccanus* in Italy, III. 40.
Mylabris zebraea, attacking locusts in Russia, I. 535; on mustard in Russia, II. 356.
Mylonapht, ineffective against *Eriosoma lanigerum*, III. 610.
Mynah, destroying insects in India, I. 345.
Mynah, Philippine (*Acridotheres tristis*), introduced into Réunion, II. 216.
Myochrous armatus, on sugar-cane in Barbados, II. 532.
Myochrous denticollis (Southern Corn Beetle), bionomics of, in U.S.A., III. 406, 573, 575.
Myochrous longulus, on cotton in California, II. 663.
myopaeformis, *Aegeria* (*Sesia*).
Myoporum deserti, *Pulvinaria greeni* on, in Australia, III. 503.
myops, *Haplocnemia*.
Myriangium duriaei (Black Fungus), destroying scale-insects in West Indies, I. 251, 263, II 129, 269, III. 650.

Myrica cerifera, Euclea indetermina on, in U.S.A., II. 94.
Myristica fragrans (Nutmeg), pests of, in Far East, I. 351, II. 535; pests of, in Guadaloupe, I. 351.
Myristica laurifolia (Wild Nutmeg), *Aulacaspis myristicae* on, in Ceylon, III. 168.
myristicae, Aulacaspis.
Myrmecocystus, destroying *Cydia pomonella* in Russia, III. 35.
Myrmelachista ambigua ramulorum, on coffee in Porto Rico, I. 389; associated with *Coccus* spp., III. 517.
Myrmeleon, destroying vine moths in Russia, III. 211.
myrmeleon, Eulophonotus.
Myrmicomorpha perniciosa, parasite of *Cirphis* spp. in Texas, III. 648.
Myrmus miriformis, on cut grass in Russia, III. 479.
Myrobolan Cherry Plum, resistant to *Aegeria opalescens*, II. 439.
myrtilli, Anarta.
Myrtle, *Aulacaspis rosae* on, in Australia, III. 80; *Rhabdopterus picipes* on, in U.S.A., III. 672.
Mysia oblongoguttata, destroying Aphids in Enlgand, I. 120, II. 497.
mystacea, Volucella (see *V. bombylans*).
mytilaspidis, Aphelinus; *Schizotetranychus* (*Tetranychus*).
Mytilaspis, on coffee in Java, III. 646.
Mytilaspis beckii (see *Lepidosaphes*).
Mytilaspis beyeriae, sp. n., on *Beyeria viscosa*, III. 548.
Mytilaspis citricola (see *Lepidosaphes beckii*).
Mytilaspis conchiformis (see *Lepidosaphes ulmi*).
Mytilaspis dispar (see *Lepidosaphes*)
Mytilaspis pomorum (see *Lepidosaphes ulmi*).
Mytilaspis spinosa (see *Lepidosaphes*).
Mytilaspis subspiculifera, sp. n., on *Exocarpus aphylla* in Australia, III. 79.
Myxexorista pexops (see *Zenillia*).
Myzine sexcincta (see *Elis*).
Myzinida, parasite of *Scapteriscus* in Cuba, I. 324.
Myzocallis ononidis, on lucerne in Europe, I. 527.
Myzocallis pasaniae, sp. n., on *Pasania densiflora* in California, III. 687.
Myzocallis quercus, on *Quercus robur* in California, II. 251.
Myzocallis saccharinus, sp. n., on *Sagina* in Italy, III. 54.
Myzodes, sp. n., on sunflower in Russia, III. 45.
Myzus asclepiadis, food-plants of, in Africa, III. 749.
Myzus bragii, on *Carduus arvensis* in Colorado, III. 351; *Rhopalosiphum hippophaes* confused with, in U.S.A., III. 573.
Myzus cerasi (Black Cherry Aphis), on fruit trees in Belgium, II. 177; declared a pest in Br. Columbia, I. 48; bionomics and control of, in Canada and U.S.A., I. 283, 413, 512, II. 32, 458, 675, 677, III. 180, 192, 423; bionomics and control of, in Russia, II. 35, 79, 80, 81, III. 220, 223, 399, 401, 442, 604, 606, 638.
Myzus citricidus (Orange Aphis), in St. Vincent, III. 412.
Myzus dispar, on gooseberries and currants in Maine, II. 510.
Myzus elaeagni (see *Rhopalosiphum hippophaes*).
Myzus fragaefolii, on strawberries in California, II. 251.
Myzus fragariae, sp. n., on strawberries in England, I. 236.
Myzus mali, on *Pyrus* in Russia, II. 79.
Myzus neorosarum, on roses, III. 748.
Myzus persicae (Peach Aphis), controlled by *Aphidius rapae* in Hawaii, III. 363; bionomics and control of, in Canada and U.S.A., I. 177, 405, II. 433, 491, III. 178. 192, 352, 423; in Victoria, III. 97.
Myzus persicae-niger, on peach in Canada, II. 433.
Myzus porosus, on wild strawberry in Maine, III. 423.
Myzus pyrarius, on *Pyrus* in Russia, II. 79.
Myzus pyrinus, on *Pyrus* in Russia, II. 79.
Myzus ribicolus, on *Ribes* in Russia, II. 79, 81.
Myzus ribis (Currant Aphis), on fruit trees in Belgium, II. 177; in Germany, II. 500; bionomics of, in Russia, II. 79, 81, 370, III. 220, 224; bionomics of, in Canada and U.S.A., I. 276, 405, II. 510, 512, 675, III. 192, 269, 552, 570.
Myzus rosarum (Buckt.) (see *M. neorosarum*).
Myzus rosarum (Kalt.), on *Rosa* in Maine, III. 424; on roses, III. 748.
Myzus spiraecola, on *Spiraea* in Maine, III. 524.
Myzus tetrahodus, on roses in Egypt, III. 749.

N.

Nabis (*Reduviolus*) *ferus*, attacking *Chortophila vicina* in Canada, II. 665; food-plants of, in Russia, III. 479, 727; disseminating fire-blight in U.S.A., II. 288; predaceous on other insects in U.S.A., III. 335, 471, 577.
Nabis flavomarginatus, in Russia, III. 727.
Nabis rugulosus, destroying moths in Russia, III. 211.
Nacoleia (*Omiodes*) *accepta*, parasites of, in Hawaii, III. 681, 757.
Nacoleia asaphombra, parasitised by *Limnerium blackburni* in Hawaii, III. 682.
Nacoleia blackburni (see *Phryganodes*).
Naenia typica (Dark Gothic Moth), on apple in Britain, II. 562, III. 659.
Nail-headed Scale (see *Chrysomphalus aonidum*).
nana, *Phaneroptera*; *Trichogrammatoidea*.
nanana, *Enarmonia* (*Epinotia*, *Eucosma*, *Grapholitha*).
nanella, *Recurvaria* (*Gelechia*).
Nantucket Pine-tip Moth (see *Rhyacionia frustrana*).
nanum, *Trichogramma* (*Chaetosticha*).
nanus, *Campoplex*; *Scymnus*.
Naphtha, destruction of Lepidopterous eggs with, II. 10, 223, 334; method of using, against *Gryllotalpa*, II. 51, 52; spraying with, against clothes moths, III. 509; and resin, for making tanglefoot, II. 180; emulsion of, formulae for, I. 427, II. 199, 514; use of, as an insecticide in Russia, I. 493, II. 33, 35, 77, 199.
Naphtha Distillate Oil, relative attractiveness of, for *Ceratitis capitata*, III. 28.
Naphthaline, against *Lepisma saccharina*, III. 714; against pests of stored grain, I. 21, II. 41, 204, 205, 503, III. 488, 626; for disinfecting cotton seed, II. 581; ineffective against *Monarthropalpus buxi*, III. 350; mixed with soil as a deterrent, I. 14, 111, 333, 424, 434, III. 159, 223, 370, 456; not satisfactory for destroying silkworm pupae, II. 199; and camphor, preparation of, for fumigating, III. 633; and coal tar, against Aphids, I. 271; and lime, as an insecticide, II. 349, 695; and sulphur, against *Clysia ambiguella*, I. 338, III. 188; emulsion of, against lucerne pests, II. 395; emulsion, preparation of, III. 361.
Naphthol, against foul-brood in bees, III. 38.
napi, *Pieris*.
napiformis, *Xylococcus*.
Napomyza chrysanthemi (see *Phytomyza*).
nararia, *Natada*.
Narcissus, pests of, in Britain, II. 88, 89, 344, 345, 633, 656; *Chrysomphalus aonidum* on, in Egypt, II. 605; *Merodon equestris* on, in Europe and U.S.A., I. 386, II. 88, 246, 345, III. 589, 742.
Narcissus Fly (see *Eumerus strigatus* and *Merodon equestris*).
Narnia, recommended to be introduced into Queensland to destroy cactus, III. 126.
Narnia pallidicornis, on cactus in U.S.A., I. 82.
Narrow-winged Tree Cricket (see *Oecanthus angustipennis*).
nasalis, *Cermatulus*.
nasicornis, *Oryctes*.
Nasonia tortricis, parasite of *Tortrix fumiferana* in U.S.A., I. 202.
nassonowi, *Chaitophorus*.
nasturtii, *Contarinia* (*Diplosis*).
Nasturtium, *Agromyza pusilla* on, in Hawaii, III. 363; *Phaedon cochleariae* on, in Sweden, III. 346; not attacked by *Tetranychus telarius* in U.S.A., III. 64; *Crocidolomia binotalis* on, in Zanzibar, III. 125; effect of hydrocyanic acid gas on, II. 611.
nasutum, *Armadillidium*.
nasutus, *Syrphus*.
Natada nararia (Fringed Nettle Grub), on tea in Ceylon, II. 654.
Natal, *Chalioides junodi* on wattle in, I. 303, III. 502; *Dactylopius coccus* established on prickly pears in, II. 440; fruit flies from, III. 748; measures against *Aspidiotus perniciosus* in, II. 86; miscellaneous pests in, I. 473, II. 547, 573, 653, III. 60, 61, 167; sugar-cane pests in, I. 269, 301, 302; termites in, I. 12.
Natal Plum (see *Carissa arduina*).
natalensis, *Termes*.
nauticus, *Xylotrechus*.
navale, *Tribolium*.
navozovi, *Acyrthosiphon*.
Neanastatus orientalis, sp. n., from the Philippines, III. 633.
Neanastatus philippinensis, sp. n., from the Philippines, III. 633.
neavei, *Macrosiphum*; *Pleurotropis*.
Nebraska, miscellaneous pests in, I. 40, 77, 430, III. 141, 371, 577, 586.
nebris, *Papaipema*.

nebulella, Homoeosoma; *Mineola indiginella.*
nebulosa, Cassida; *Haplocnemia*; *Polia* (*Aplecta*).
nebulosus, Camptobrochus; *Liopus*; *Scymnus*; *Sphenophorus*; *Sphingonotus.*
Necrobia rufipes, in copra in the Philippines, II. 691.
Necrobia violacea, in Sweden, II. 100.
Nectandra rodiaei (Greenheart), not attacked by termites, III. 379.
Nectarine, *Ceratitis capitata* on, in S. Europe, III. 143; fruit flies on, in S. Africa, I. 196; *Anarsia lineatella* on, in U.S.A., II. 300.
Nectarophora chrysanthemicolens, in U.S.A., III. 761.
Nectarophora pisi (see *Acyrthosiphon*).
Nectarophora rosae (see *Macrosiphum*).
Nectria ditissima (Apple Canker), I. 160, II. 572; declared a pest in Nova Scotia, III. 71.
Neda sanguinea (see *Cycloneda*).
nefaria, Phorocera.
neglecta, Apomecyna; *Sphenoptera.*
neglectus, Oecophyllembius.
Nematodes (see *Heterodera, Mermis, Tylenchus*).
Nematus, on bush fruits in Germany, II. 500.
Nematus abietum (see *Lygaeonematus pini*).
Nematus appendiculatus (see *Pristiphora pallipes*).
Nematus consobrinus (see *Pteronus leucotrochus*).
Nematus erichsoni (see *Lygaeonematus*).
Nematus moestus (see *Lygaeonematus*).
Nematus ribesii (see *Pteronus*).
Nematus salicis (see *Pteronus*).
Nematus septentrionalis (see *Croesus*).
Nematus ventricosus (see *Pteronus ribesii*).
Nematus vesicator (see *Pontania*).
nemea, Blepharidopsis.
Nemophila insignis, Exomias pellucidus on, in England, III. 288, 564.
nemoralis, Carabus; *Neurotoma* (*Lyda, Pamphilius*).
nemorana, Hemerophila (*Simaethis*).
Nemorilla maculosa, parasite of *Phlyctaenodes sticticalis* in Russia, I. 535, III. 221.
Nemorilla notabilis, parasite of *Hyponomeuta malinellus* in Russia, I. 347.
Nemorilla varia, parasite of *Cacoecia costana* in France, I. 221.
nemorum, Anthocoris; *Phyllotreta* (*Haltica*).
Nemosoma elongatum, predaceous on *Hypoborus ficus* in France, III. 10.
nenuphar, Conotrachelus.
Neobrachista novifasciata, sp. n., from North Queensland, III. 256.
Neocelatoria ferox, sp. n., parasite of *Diabrotica vittata* in U.S.A., II. 272.
neoclyti, Moerophora.
Neoclytis capraca, Moerophora neoclyti parasite of, in U.S.A., III. 658.
Neoclytus caprea, III. 658.
Neoconocephalus, on sugar-cane in Mexico, I. 184.
Neolecanium cinnamoni, sp. n., on cinnamon in Ceylon, III. 168.
Neolecanium pseudoleae, sp. n., on cinnamon in Ceylon, III. 755.
Neomegastigmus collaris, sp. n., from Queensland, III. 358.
Neomegastigmus petiolatus, sp. n., from Queensland, III. 358.
Neopharsalia vagans, on *Ficus* and *Castilloa* in Java, II. 534, 535.
Neophasia menapia (Pine White Butterfly), in Br. Columbia, I. 87.
Neophyto, nocturnal habits of, III. 248.
Neophyto nocturnalis, parasite of *Lachnosterna* in U.S.A., III. 691.
neorosarum, Myzus.
Neosigniphora nigra, parasite of *Hemichionaspis minor* in Peru, I. 157, 323.
Neotetranychus bicolor, III. 252; food-plants of, in New Jersey, III. 566.
Neotetranychus modestus, III. 253.
Neotetranychus rubi, on raspberries in Sweden, III. 253.
Neotoxoptera violae, sp. n., in the Transvaal, III. 749.
Neoxabea bipunctata, bionomics and distribution of, in U.S.A., III. 734.
Nepa, immune to *Cocobacillus cajae*, I. 167.
Nepeira benevola, sp. n., parasite of *Eurymus eurytheme* in Utah, III. 151.
Nephantis serinopa, on coconut in Ceylon, II. 644.
Nephele, on *Funtumia elastica* in Nigeria, III. 166.
Nephele aequivalens, on rubber in Nigeria, II. 108.
Nephelium litchi (Lichi), scale-insects on, in Ceylon, II. 644; *Arbela tetraonis* on, in India, III. 300.
Nephelium longana, Parasa lepida on, in Ceylon, II. 654.

Nephelodes emmedonia (*minians*) (Brown Cutworm), on vegetables in Canada, II. 24, III. 629.
nephelomima, Prays (see *P. citri*).
Nephopteryx divisella, destroyed by *Chrysopa* in France, II. 91.
Nephopteryx rubrizonella, on fruit in Japan, I. 520.
Nephotettix apicalis, on rice in Japan, I. 520.
Nephotettix bipunctatus (Rice Leaf-hopper), bionomics of, on rice in India, II. 69, III. 528.
nephrolepidis, Idiopterus.
Nephus vetustus, on olive in Africa, III. 431, 432.
Nepticula subbimaculella, preservative in mines of, III. 435.
nerii, Aphis; *Aspidiotus* (see *A. hederae*); *Deilephila*.
Nerium oleander (see Oleander).
nero, Prenes.
nervatum, Rhopalosiphum.
nervosa, Depressaria (*Schistodepressaria*) (see *D. apicella*).
nervosus, Bibio.
Neso planicollis, on sugar-cane in Queensland, III. 491.
Nessler Liquid, against *Eriosoma lanigerum*, formula for, I. 161, II. 77, III. 429.
nessus, Theretra.
Nestling Birds, insect food of, I. 305.
Nettle (*Urtica dioica*), food-plant of *Aulacaspis pentagona*, I. 222; *Limonius californicus* on, in California, II. 303; food-plant of pests in Russia, II. 337, 465; Aphids on, II. 494, 621, III. 633; *Psylliodes* on, I. 87, 342; probably not a food-plant of *Acyrthosiphon pisi*, III. 704.
Nettle Grubs, on tea, etc., in Ceylon and the Far East, II. 490, 643, 654, III. 489, 662.
Nettle Grub, Blue-striped (see *Parasa lepida*).
Nettle Grub, Fringed (see *Natada nararia*).
Nettle Grub, Green (see *Thosea cana*).
Neurocolpus nubilus, on apples in Ontario, I. 406, III. 358.
Neuroterus baccarum, on *Quercus pedunculata* in Russia, III. 437.
Neuroterus lanuginosus, galls of, eaten by blue tits, I. 169.
Neuroterus numismalis, on oak in Bessarabia, III. 225; eaten by pheasants, I. 169.
Neuroterus quercusbaccarum, galls of, eaten by birds, I. 169.
Neuroterus saliens, galls of, eaten by blue tits, I. 169.
Neurotoma flaviventris (*Lyda pyri*), bionomics of, on fruit in France, II. 478; in Russia, III. 393.
Neurotoma (*Lyda, Pamphilius*) *nemoralis*, on cherries, etc., in Russia, III. 225, 604; on pears in Belgium, II. 505.
Neurotoma punctata (see *N. nemoralis*).
Neurotrichus gibbsii (Gibb's Mole), insectivorous habits of, in Br. Columbia, III. 407.
neustria, Malacosoma (*Bombyx, Clisiocampa, Gastropacha, Lasiocampa*).
Nevada, *Hoplocampa cookei* in, II. 244; insect pests from, imported into California, III. 420, 558; pests of lucerne in, III. 530.
nevadae, Polia.
Nevis, insect pests in, II. 87, 88, III. 22, 73, 302; pests of sugar-cane in, I. 165, 351, II. 88, 693.
New Britain, coconut pests in, II. 690, III. 27.
New Brunswick, insect pests in, I. 140, 231, 298, 402, II. 24, 184, 393, III. 18, 42, 62, 369.
New Caledonia, *Cryptolaemus montrouzieri* indigenous in, III. 744; insect pests in, I. 150, 351, II. 691; introduction of Agromyzid fly into, to destroy lantana, I. 62.
New England, insect pests in, III. 85, 330.
New Guinea, *Ceromasia sphenophori* imported into Hawaii from, III. 758; pests of coconut in, II. 7, 99, 689, 690, III. 27, 316; *Xyleborus confusus* on cacao in, I. 350.
New Hampshire, insect pests in, III. 37, 57, 113, 297.
New Hebrides, coconut pests in, III. 27; *Cryptolaemus montrouzieri* controlling scale-insects in, III. 744; *Rioxa musae* in, III. 3.
New Hebrides Coconut Hispid (see *Promecotheca opacicollis*).
New Ireland, pests of coconut in, II. 689, 690.
New Jersey, Acarid mites in, III. 566; *Contarinia pyrivora* eradicated in, II. 184; control of potato pests in, III. 547; insect pests imported into, II. 386, III. 117, 354, 469; life-history of *Mesogramma polita* in, III. 568; miscellaneous pests in, I. 295, II. 121, 524, III. 115, 132, 191–194, 514, 559, 589, 690, 761.
New Mexico, *Anastatus semiflavus*, sp. n., from, III. 151; bionomics of *Typhlocyba comes* in, III. 530; miscellaneous pests from, III. 82,

269, 297, 327, 475, 511; *Sympherta mnemonicae*, sp. n., from, III. 18.
New South Wales, bees infested with *Nosema apis* in, III. 712; legislation against *Ceratitis capitata* in, III. 582; miscellaneous pests in, I. 503, II. 128, 324, 492, 691, 705, III. 24; fruit pests and their control in, I. 503, 547, II. 493, 705, III. 79, 158, 366, 582, 751; poisoning trees with arsenic in, III. 560.
New York, I. 77, 140, 322, 364, 406; control of grasshoppers in, III. 450; control of *Rhagoletis pomonella* in, III. 38, 57; fruit pests in, I. 64, 127, 225, 276, 290, 425, 528, II. 529, 673, III. 38, 57, 77, 446, 554; miscellaneous pests in, I. 3, 53, 201, 264, 295, 528, II. 12, III. 87, 132, 149, 273, 330, 420, 459; natural enemies of *Aspidiotus perniciosus* in, II. 384, 625; pests from, intercepted in California, III. 690; *Scolytus quadrispinosus* on hickory in, II. 183, III. 559.
New York Weevil (see *Ithycerus noveboracensis*).
New Zealand, experiments with lime-sulphur in, III. 736; fruit pests and their control in, I. 167, II. 234, 576, 603, 604, III. 79; legislation against *Ceratitis capitata* in, III. 582; miscellaneous pests in, I. 193, 343, II. 246, III. 80, 302, 416, 706, 721; new Coccidae in, III. 721; pests from, intercepted in California, III. 420, 455, 739; *Phthorimaea operculella* on potato in, I. 102, II. 280, 401.
New Zealand Peach Moth (see *Ctenopseustis obliquana*).
newsteadi, *Dactylopius confusus*; *Diaspis*; *Lepidosaphes*.
Nezara, in E. Africa, II. 570.
Nezara hilaris, on fruit in U.S.A., I. 264, II. 704, III. 545.
Nezara viridula, on tomato in Florida, III. 179; on lettuce in the Philippines, I. 314; on cacao in West Indies, II. 87, III. 663.
Nicaragua, *Franklinothrips vespiformis* in, III. 566; locusts in, II. 203.
Nicotiana (*see* Tobacco).
Nicotiana glauca, *Protoparce quinquemaculatus* on, in Hawaii, II. 630; resisting inoculation with mosaic disease, I. 19.
Nicotiana rustica, decoction of, as an insecticide, I. 110, 371, III. 505.
Nicotiana sylvestris, *Phthorimaea operculella* on, II. 401.
Nicotiana tabacum (see Tobacco).
Nicotiana viscosa, resistant to inoculation with mosaic disease, I. 19.
Nicotine, against Aphids, I. 78, 237, 239, 282, 284, 452, II. 4, 47, 82, 234, 410, 500, 527, 528, 573, 619, 688, III. 78, 97, 192, 362, 464, 526, 554, 696, 734, 735, 743, 762; against chrysanthemum pests, II. 425, III. 114, 747; against mites, III. 64, 254, 362, 372; against thrips, I. 217, III. 14, 97, 470, 557; against vine pests, I. 10, 71, 174, 277, 312, 332, 337, 356, 397, 422, 472, II. 25, 182, 194, 239, 240, 329, 331, 410, 411, 446, 451, 453, 499, 510, 537, 538, 539, 552, 575, 586, 635, 667, 680, 681, 682, 684, 686, III. 211, 496, 616; formulae for, and preparation of sprays containing, I. 99, 110, 178, 353, 529, II. 234, 240, 244, 282, 309, 410, 446, 499, 538, 539, 546, 562, III. 97, 163, 289; experiments with various salts of, II. 50; conditions of sale of, in France, II. 195; properties and cost of, as an insecticide, I. 109, 334, 338, II. 26, 50, 70, 211, 393, 562, 593, III. 284; (see also Black Leaf 40, and Tobacco).
Nicotine Sulphate, and Bordeaux mixture, as an insecticide, III. 447; compared with quassiin, as an insecticide, III. 187; formula for, in sprays, I. 178, 384.
nictitans, *Apamea* (*Hydroecia*).
nidicola, *Zygobothria*.
nidificus, *Prociphilus*.
niger, *Aphis persicae*; *Astatus*; *Athous*; *Coccophagus*; *Dolerus*; *Lasius*; *Margarodes*; *Ufens*.
Nigeria, cacao pests in, III. 663; *Ceratitis* spp. and their parasites in, I. 97, 247, 388, II. 316, III. 169, 433, 748; Coccidae in, II. 203, 276, 353, 354, 410, 422; insect pests of, II. 106-108, 575, 610, III. 164-167, 168, 367; new Braconids and Chalcids from, II. 346, 348, III. 167, 433, 444.
nigeriensis, *Chionaspis*; *Pelorotelopsella*.
Night-hawk, destroying insects, III. 380, 559.
Nightshade (see *Solanum*).
nigra, *Ceratitis*; *Contarinia* (*Cecidomyia*); *Formica*; *Neosiguiphora*; *Phytomyza*; *Saissetia* (*Lecanium*); *Salpingogaster*; *Xana*.
nigrescens, *Hyalarcta*.

nigrescentella, Phyllorycter (*Lithocolletis*).
nigricana, Cydia (*Grapholitha*).
nigriceps, Anagrus armatus ; *Litus* ; *Polybia*.
nigricornis, Carpocoris ; *Chrysopa* ; *Leucopis* ; *Oecanthus* (see *O. fasciatus*) ; *Phytomyza* ; *Trioza*.
nigricostella, Epithectis.
nigricoxalis, Idechthis.
nigrifrons, Adoretus.
nigrinectaria, Macrosiphum.
nigrinus, Chelonus ; *Elater*.
nigripalpis, Exorista.
nigripennis, Pseudobracon.
nigripes, Agromyza ; *Aphis* ; *Domomyza* ; *Lydella* ; *Phyllotreta* ; *Pleurotropis* ; *Pseudapanteles* ; *Tomaspis*.
nigrirostris, Hypera (*Phytonomus*).
nigrita, Podonta (*Cistela*) ; *Sigiphora*.
nigritarsis, Agromyza ; *Pegomyia*.
nigritarsus, Ichneumon.
nigrithorax, Chalcitelloides.
nigritulus, Cybocephalus.
nigritus, Otiorrhynchus (see *O. tristis*).
nigrivenella, Mussidia.
nigriventre, Agaon.
nigrivittis, Conorrhynchus.
nigrocinctus, Microcryptus.
nigrofasciatum, Eulecanium (*Lecanium*).
nigrofasciatus, Dysdercus ; *Oedaleus* (*Locusta, Pachytylus*).
nigromaculata, Seira.
nigromaculatus, Exochomus ; *Stenobothrus*.
nigropunctatus, Aspidiotus.
nigrosuturatus, Coniocleonus.
nigrovariegatus, Megastigmus.
nigrum, Lecanium (see *Saissetia*).
nimrod, Xylotrupes (see *X. gideon*).
nipae, Pseudococcus.
Nisotra uniforma, on cotton in Africa, II. 2, 106.
nitela, Papaipema (see *P. nebris*).
nitens, Attelabus ; *Camptobrochus* ; *Setora*.
nitida, Aleochara ; *Allorrhina* ; *Erynnia*.
nitidalis, Diaphania.
nitidiventris, Phytomyptera.
nitidulator, Opius.
nitidulus, Anastoechus (*Systoechus*) ; *Diplolepis* (*Cleptes*) ; *Conocephalus*.
nitidus, Macrocentrus ; *Pinnaspis* (see *Lepidosaphes pyriformis*).
Nitocris (see *Dirphya*).
Nitrobenzene, against thrips, II. 271 ; against vine pests, III. 211 as an insecticide, III. 284.
Nitrolim, against froghoppers, I. 320, II. 60, 61 ; against *Serica assamensis*, III. 488.
niveus, Oecanthus.
nobilis, Bryobia ; *Cassidula* ; *Gnorimus*.
nociva, Desiantha.
noctilio, Sirex.
Noctua c-nigrum (see *Agrotis*).
Noctua clandestina (see *Agrotis unicolor*).
Noctua fennica (see *Agrotis*).
Noctua solani, on potato in Brazil, II. 173.
Noctua unicolor (see *Agrotis*).
nocturnalis, Neophyto.
nocturnus, Rhadinoscapus.
nodiceps, Cryptognatha.
Nodonta puncticollis, on roses in U.S.A., III. 709.
nolae, Omorgus.
nomas, Tentyria.
nonagrioides, Sesamia (see *S. vuteria*).
Nopalea cochinelifera, Dactylopius confusus newsteadi confined to, III. 126.
Norbanus, parasite of *Lasioderma sericorne* in the Philippines, I. 170.
Noronhia emarginata (Chinese Plum), *Ceratitis capitata* on, in Hawaii, I. 374.
Northern Spy Apple, resistant to *Eriosoma* (*Schizoneura*) *lanigerum*, II. 4, 163.
norvegica, Vespa.
norvegicum, Acyrthosiphon.
norvegicus, Calocoris.
Norway, forest and timber pests in, III. 291, 696 ; fruit pests in, II. 419 ; miscellaneous pests in, III. 107.
Norway Spruce, pests of, in New York, III. 474.
Nosema apis, infesting bees, and its control, I. 330, II. 238, 530, 531, 564, III. 152, 612, 712.
Nosema bombi, a new parasite of *Bombus*, III. 168.
Nosema bombycis, Phthorimaea operculella artificially infected with, II. 401.
Nosematosis, among bees in Russia, III. 152.
nota, Blastophaga ; *Sycophaga*.
notabilis, Encyrtonotus ; *Nemorilla*.
notandus, Teleopterus.
notatus, Pissodes.
notescens, Scymnus.
Nothopanax, Leucaspis gigas (*Fiorinia morrisi*) on, in New Zealand, III. 721.
Notodonta trepida, on forest trees in Russia, II. 13.

Notolophus, on potatoes in Oregon, I. 136.
Notolophus antiqua (see *Orgyia*).
Notonecta, immune to *Cocobacillus cajae*, I. 167.
Notopygus scutellatus, sp. n., in U.S.A., III. 691.
Notopygus virginiensis, sp. n., parasite of *Euzophera semifuneralis* in U.S.A., III. 418.
Notostira erratica, on cereals, etc., in Russia, III. 45, 479.
Notoxus cornutus, on vines in Russia, I. 487.
Notoxus monoceros, on vines in Russia, I. 487.
Notoxus monodon, preying on *Cacoecia* (*Archips*) *argyrospila* in U.S.A., I. 226.
Nova Scotia, inspection of imported fruit, etc., in, I. 47; list of insects declared to be pests in, III. 71; *Microdus ocellanae* parasite of *Eucosma ocellana* in, I. 339; miscellaneous pests in, I. 140, 201, 403, 429, II. 203, 252, 393, III. 18, 62, 69, 369, 619, 678.
novaroensis, *Aegeria* (*Sesia*).
noveboracensis, *Draeculacephala*; *Ithycerus*.
novemdecimpunctata, *Anisosticta*.
novemguttata, *Glenea*.
novemnotata, *Coccinella*.
novifasciata, *Neobrachista*.
Novius (*Vedalia*) *cardinalis*, introduced into Hawaii, III. 757; attempt to introduce into Mauritius against *Icerya seychellarum*, II. 612; in bait-traps for *Ceratitis capitata*, III. 568; not suitable for controlling *Icerya purchasi* on pears, III. 348; utilisation of, to control *Icerya purchasi*, I. 171, 172, 229, 320, 321, 354, 392, 427; II. 86, 128, 189, 193, 299, 397, 421, 439, 450, III. 143, 492, 757.
Novius cruentatus, predaceous on *Palaeococcus fuscipennis* in Saxony, I. 373.
noxiale, *Isosoma*.
noxius, *Brachycolus*; *Corymbites*.
nubecula, *Chrysopilus*.
nubifera, *Aleurodes*.
nubilalis, *Pyrausta* (*Botys*).
nubilus, *Neurocolpus*.
Nucifraga caryocatactes (Nutcracker), destroying *Dendrolimus segregatus* in Russia, II. 223.
nucleorum, *Pachymerus* (*Caryoborus*).
nucum, *Balaninus*.
nudalis, *Phlyctaenodes* (*Eurycreon*).
nudatus, *Cryptococcus* (see *Kuwanina parva*).
Nudaurelia, on cotton in Africa, II. 1.
Numenius variegatus (Variegated Curlew), destroying locusts in the Philippines, I. 68.
numismalis, *Neuroterus*.
Nun Moth (see *Lymantria monacha*).
Nupserha apicalis (Bindweed Gallmaker), bionomics of, in Natal, III. 61.
nupta, *Catocala*.
nurus, *Sarcophaga* (see *S. haemorrhoidalis*).
nusslini, *Chermes*.
Nuts, pests of, in Oregon, III. 262; pests of, in Russia, II. 636, 672; pests of, in Spain, III. 276.
Nut-cracker, destroying *Dendrolimus segregatus* in Russia, II. 223.
Nut-grass (*Cyperus*), disadvantages of utilising *Antonina purpurea* against, III. 364; pests of, in U.S.A., I. 262, 430.
Nuthatch, destroying bark-beetles in Germany, II. 529; destroying *Dasychira pudibunda* in Holland, III. 196.
Nutmeg (see *Myristica fragrans*).
Nutmeg, Wild (see *Myristica laurifolia*).
nuttalli, *Cantharis*.
Nuttallornis borealis, predaceous on *Parandra brunnea* in U.S.A., III. 672.
Nuytsia florabunda, *Pulvinaria nuytsiae* on, in Australia, III. 503.
nuytsiae, *Pulvinaria*.
Nyasaland, Coccidae in, II. 276; cotton and tobacco pests in, I. 123, 272; fruit flies from, III. 748; miscellaneous pests of, II. 276, 277, 340, 555; new Chalcids from, III. 443, 444; pests of stored grain in, II. 117.
Nyctemera annulata (see *Deilemera*).
Nymphaea alba, *Rhopalosiphum nymphaeae* on, III. 749.
Nymphaea lutea, *Rhopalosiphum nymphaeae* on, III. 749.
nymphaeae, *Rhopalosiphum* (*Siphocoryne*).
Nymphula depunctalis, on rice in India and Ceylon, I. 89, 170, II. 68, 69, 139.
Nymphula fluctuosalis, on rice in Far East, II. 489; on rice in India, I. 170.
Nyophorbe, not attacked by rhinoceros beetle in the Seychelles, II. 568.
Nysius angustatus (False Chinch Bug), in U.S.A., I. 154, II. 536; preying on *Blissus leucoptera*, II. 227.
Nysius angustatus minutus, on apricot and peach in California, II. 707.

Nysius delectus, on tobacco in Hawaii, II. 630.
Nysius ericae, on peaches in U.S.A., III. 512.
Nysius jacobeae, in Russia, III. 727.
Nysius senecionis, in vineyards in France, I. 229, II. 228, 556; on vines in Italy, III. 113.
Nysius vinitor (Rutherglen Bug), on potatoes, etc., in Australia, II. 119, III. 366, 470.
Nyssa sylvatica, *Eriocampoides* on, in U.S.A., III. 658.

O.

Oak, *Asterolecanium quercicola* on, in Australia, III. 750; *Agrilus biguttatus* on, in Belgium, II. 177; pests of, in Britain, I. 388, II. 184, 619, III. 277, 346, 676, 762; pests of, in Canada, I. 231, 299, 401, 407, II. 204, III. 43; *Lymantria dispar* on, in Dalmatia, I. 239; pests of, in France, I. 409, II. 195, 196, 402, III. 10; pests of, in Germany, I. 545, II. 486, 501, 642, 643, 667; *Cossus cossus* in, in Holland, III. 198; *Phylloxera acanthochermes* on, in Hungary, II. 124; pests of, in Italy, II. 150, III. 124; *Phylloxera quercus* on, in Norway, III. 697; pests of, in Portugal, I. 313; pests of, in Russia, I. 317, 318, 488, 523, II. 10, 11, 13, 45, 275, 331, 332, 334, 337, 419, 465, 640, 712, III. 45, 47, 49, 66, 105, 217, 221, 224, 226, 227, 403, 437, 438, 482, 485, 544, 601, 603, 639, 728; resistance of varieties of, to insect pests in Russia, III. 437; pests of, in South Africa, II. 300, 654; *Anobium striatum* and *Xestobium rufovillosum* in, in Sweden, III. 255; pests of, in U.S.A., I. 3, 35, 100, 130, 161, 163, 225, 243, 280, 381, 413, 417, 418, II. 94, 115, 132, 253, 287, 294, 295, 394, 438, 485, 599, 600, 635, 662, 674, III. 13, 15, 86, 88, 162, 249, 270, 306, 331, 373, 473, 558, 579, 631, 653, 668, 671, 673, 709, 734; not attacked by *Aspidiotus perniciosus*, I. 472.
Oak, Black (see *Quercus velutina*).
Oak, Cork (see Cork oak).
Oak, Californian Live (see *Quercus chrysolepis*).
Oak, Coast Live (see *Quercus agrifolia*).
Oak, Evergreen (see *Ilex*).
Oak, Live (see *Quercus virginiana*).
Oak, Red (see *Quercus rubra*).
Oak, Scarlet (see *Quercus coccinea*).
Oak, Tan-bark (see *Pasania densiflora*).
Oak, Water (see *Quercus nigra*).
Oak, White (see *Quercus alba*).
Oak, Willow (see *Quercus phellos*).
Oak Branch Borer (see *Polycaon confertus*).
Oak Moth, Californian (see *Phryganidia californica*).
Oak Scale (see *Eulecanium quercifex*).
Oak Tortrix (see *Tortrix viridana*).
Oak Twig Girdler (see *Agrilus politus*).
Oak Twig Pruner (see *Elaphidion villosum*).
oamaruensis, *Pseudococcus*.
Oats (*Avena*), *Hodotermes* on, in Africa, III. 756; *Toxoptera graminum* on, in Africa, I. 39, II. 153, 154; not attacked by *Hylemyia coarctata* in Austria, II. 475; pests of, in Britain, I. 378, 434, II. 498, 655; pests of, in Canada, I. 401, II. 469, 491, III. 70, 368, 551, 629, 631; pests of, in Denmark, III. 245, 246, 697; pests of, in France, I. 226, II. 151, 420, III. 428; pests of, in Germany, II. 151, 377; pests of, in Holland, I. 386, III. 200, 664, 740; *Lema melanopa* on, in Hungary, II. 309; *Cirphis unipuncta* on, in India and Java, I. 169; *Sitotroga cerealella* on, in North Africa, II. 231; *Laphygma exempta* on, in Rhodesia, III. 359; pests of, in Russia, I. 216, 361, 364, 398, 479, 486, 487, 490, 493, 494, II. 5, 34, 43, 171, 172, 315, 319, 371, 648, 716, 718, III. 41, 50, 67, 75, 112, 147, 205, 206, 340, 402, 443, 479, 487, 537, 600, 634, 635, 640; *Trinacriella magnifica* on, in Sicily, III. 54; *Jassus sexnotatus* on, in Sweden, III. 525; pests of, in U.S.A., I. 265, 383, 430, 453, II. 46, 247, 382, 383, 696, III. 18, 298, 333, 351, 423, 529, 576, 683, 693; not atttacked by *Chortophila* (*Adia*) *genitalis*, II. 351; not attacked by *Heterodera radicicola*, III. 178.
Oberea bimaculata (Raspberry Cane Borer), bionomics of, in Canada and U.S.A., I. 143, 168, 406, III. 181.
Oberea linearis, on osiers in Germany, II. 643; on *Corylus* in Russia, II. 672.

Oberea oculata (Eye-spotted Apple-twig Borer), on apple in Missouri, III. **180**; on willow in North Italy, III. **124**.
Oberea tripunctata, bionomics of, on elm in Minnesota, III. **350**.
Oberea ulmicola, III. **350**.
obesi, *Microtermes*.
obesus, *Dendroctonus*; *Strophosomus* (see *S. capitatus*).
obfuscata, *Lasiopteryx* (*Lasioptera*).
obliqua, *Allograpta*; *Diacrisia*; *Typhlocyba*.
obliquana, *Ctenopseustis*.
obliquatus, *Polydrosus*.
Oblique-banded Leaf-roller (see *Cacoecia rosana*).
obliterata, *Adalia*.
obliteratus, *Dioctes*.
oblongoguttata, *Mysia*.
oblongopunctatus, *Pterostichus*.
oblonga, *Podonta* (*Cistela*) (see *P. nigrita*).
oblongus, *Phyllobius*.
obovatus, *Brevipalpus*.
obscura, *Agrotis* (see *A. ravida*); *Cantharis*; *Cytherea*; *Dicerca*; *Inesida*; *Silpha*.
obscuraria, *Gnophos*.
obscurata, *Scutellista cyanea*.
obscuriceps, *Termes*.
obscuriventris, *Formica*.
obscurus, *Adoxus*; *Agriotes*; *Barynotus*; *Chiloneurus*; *Chrysomphalus*; *Homalotylus*; *Hylastinus*; *Pseudococcus*; *Rhabdocnemis* (*Sphenophorus*); *Sciopithes*; *Tenebrio*.
obsoleta, *Chloridea* (*Heliothis*).
obsoletus, *Bruchus* (see *B. obtectus*); *Dioretus*; *Lagochirus*; *Metamasius*; *Monodontomerus*.
obtectus, *Bruchus* (*Acanthoscelides*).
obtusilobae, *Dentifibula*.
obtusus, *Phenacoccus*; *Pseudococcus* (*Dactylopius*).
occidentalis, *Cephus*; *Euthrips*; *Polybia*; *Signiphora*.
occulta, *Ripersia*.
oceanica, *Furcaspis*.
oceanicus, *Aspidiotus*.
ocellana, *Eucosma* (*Grapholitha*, *Spilonota*, *Tmetocera*).
ocellanae, *Microdus*.
ocellata, *Anatis*; *Coccinella*; *Glyphodes*; *Mylabris*.
ocellatus, *Sphinx*.
ocellus, *Sphaerocoris*.
Ochanostachys amentacea, attacked by *Coptotermes gestroi* in Java, I. **355**.
ochracea, *Gortyna* (see *Xanthoecia flavago*).
ochreimargo, *Earias* (see *E. insulana*).
ochrochroa, *Eublemma*.
Ochroe (see *Hibiscus esculentus*).
ochrogaster, *Euxoa* (*Paragrotis*).
Ochrophora montana, on *Bambusa tulda* in India, III. **723**.
ochropis, *Aphis*; *Ichneumon*.
Ochsenheimeria taurella, on cereals in Russia, and its control, I. **216**, **448**, II. **171**, **266**, **370**, III. **183**, **205**, **309**.
Ocinara waringi, in Java, III. **313**.
Ocneria (see *Lymantria*).
Ocnerostoma piniariella, bionomics of, on pine in Sweden, III. **147**, **292**.
octocaudata, *Monophlebus*.
octopunctatus, *Trichodes*.
octosignatus, *Brumus*.
oculata, *Chrysopa*; *Oberea*; *Olla*.
oculiperda, *Thomasia* (*Clinodiplosis*).
Ocyptamus, predaceous on *Sipha* spp. in Porto Rico, II. **49**, III. **674**.
Ocypus olens, predaceous on *Otiorrhynchus sulcatus*, II. **360**.
Odoiporus longicollis, on plantains in Ceylon, II. **644**; in India, III. **145**.
odonaspidis, *Adelencyrtus*.
Odonaspis, intercepted on grass from Brazil, III. **455**; on grasses in Porto Rico, I. **343**; intercepted on sugar-cane from the Philippines, II. **461**.
Odonaspis ruthae, sp. n., on *Cynodon dactylon* in Hawaii, III. **726**.
Odonaspis secreta, intercepted on bamboo from Japan, III. **455**.
Odonaspis (*Aspidiotus*) *secreta saccharicaulis*, on *Saccharum soltwedli* in Java, III. **317**.
Odontolabis acuminatus (see *Aegus*).
Odontomerus mellipes, infesting *Parandra brunnea* in U.S.A., III. **672**.
Odontoptera bidentata (Scalloped Hazel Moth), in Scotland, II. **498**.
Odontopus confusus, on cotton in Nyasland, II. **278**.
Odontopyge, on cotton in Africa, II. **2**; on cacao in Uganda, I. **49**, II. **592**.
Odontota dorsalis, on black locust in Kentucky, I. **54**.
Odontotermes, on cacao in Madras, II. **139**.
Odontotermes feae, on timber in Bombay, I. **525**.
Odontria, in New Zealand, III. **707**.
Odontria puncticollis, on forest trees in New Zealand, I. **194**.
Odontria zealandica, on grasses in New Zealand, I. **193**.
Odynerus chevrieranus, destroying vine moths in Russia, III. **211**.
oecanthi, *Cacus*

Oecanthus angustipennis (Narrow-winged Tree Cricket), bionomics of, in U.S.A., II. 674, III. 733.
Oecanthus exclamationis, bionomics of, in U.S.A., II. 673, III. 733.
Oecanthus fasciatus (Striped Tree Cricket), bionomics of, in U.S.A., II. 673, 674, III. 733.
Oecanthus latipennis, bionomics of, in U.S.A., II. 673, III. 734.
Oecanthus nigricornis (see *O. fasciatus*).
Oecanthus niveus (Snowy Tree Cricket), bionomics of, in Canada and U.S.A., I. 168, 404, II. 673, 674, III. 733.
Oecanthus pellucens, on vines in Italy, III. 113; on vines in Russia, II. 52, III. 44, 441.
Oecanthus pini, bionomics of, in U.S.A., II. 673, III. 734.
Oecanthus quadripunctatus, bionomics of, in U.S.A., II. 673, III. 733.
Oeceticoides (*Acanthopsyche*) *bipars*, on tea in Far East, II. 490.
Oeceticus omnivora (see *Liothula*).
Oeceticus platensis (Argentine Bagworm), measures against, II. 683.
Oecodoma cephalotes, in French Guiana, II. 223, 224.
Oecophora (*Harpella*) *geoffroyella*, supposed to be parasitised by *Coenopachys hartigii*, III. 675.
Oecophylla, destroying Capsid bugs in the Gold Coast, II. 670; associated with scale-insects in Nigeria, II. 107, III. 165.
Oecophylla smaragdina, on Para rubber in Ceylon, II. 191; enemy of locusts in Federated Malay States, III. 467; associated with scale-insects in Java, I. 150, III. 316, 647, 663.
Oecophylla smaragdina longinoda, driving off cacao pests in Nigeria, III. 165.
Oecophyllembius inferior, on olive in Africa, III. 432.
Oecophyllembius neglectus, on olive in Italy, I. 390.
Oedaleus nigrofasciatus, *Coccobacillus acridiorum* against, in the Philippines, III. 683; bionomics and control of, in Russia and Siberia, I. 535, 542, II. 170, 353, 509, 614, 716, III. 40, 44, 239, 242, 401, 537, 636.
Oedemasia concinna (see *Schizura*).
Oedipoda coerulans (see *Sphingonotus*).
Oedipoda coerulescens, bionomics of, in Russia, I. 535, II. 716, III. 239, 537, 538, 636.
Oedipoda salina, in Russia, III. 636.
oenophila, *Janetiella* (*Cecidomyia*, *Dasyneura*, *Perrisia*).
Oenophthira pilleriana (see *Sparganothis*).
Oenothera biennis (Evening Primrose), *Haltica oleracea* on, in Russia, III. 538.
Ohio, insect pests from, intercepted in California, III. 558; miscellaneous pests in, I. 298, 429, 452, II. 92, 281, III. 77, 90, 330, 573; natural enemies of Syrphids in, II. 66.
Ohler's Preparation, against *Clysia ambiguella*, II. 683.
Oides affinis, on rice in Madras, II. 67.
Oides collaris, on maize and rubber in E. Africa, I. 414, II. 415.
Oidium, control of, on vines, I. 236, II. 25, 150, 166, 412, 454, 537, 551, 692, III. 562; *Thea vigintiduopunctata* feeding on, III. 92.
Oils, effect of, on dormant trees, II. 6; experiments in attracting *Ceratitis capitata* with various, III. 28.
Oil Emulsions, against scale-insects and Aphids, I. 133, II. 114, 119, 139, 379, 706, 707, III. 142, 150, 158, 274, 362, 409, 464, 489, 689; against spider mites, III. 261, 362, 489; against whiteflies, III. 326, 349, 651; formulae for, I. 133, 508, II. 114, 118, 182, 247, 322, 387, 603, III. 122, 142, 271, 274, 529, 556, 689; value of, as insecticides, III. 264; and nicotine sulphate against *Hoplocampa cookei*, I. 178.
Oil Distillate, effect of spraying with, III. 556, 558.
Oil Palm (see *Elaeis guineensis*).
Oil Seed, Siberian (see *Camelina sativa*).
okitsuensis, *Pulvinaria*.
Oklahoma, grasshoppers in, III. 82, 297; *Prosopothrips cognatus* in, III. 577.
Okra (see *Hibiscus esculentus*).
Olea chrysophylla (see Olive).
Olea laurifolia (Black Ironwood), resistant to attacks of termites in Rhodesia, I. 465.
Olea verrucosa, pests of, in S. Africa, III. 432.
oleae, *Anchonocranus*; *Aonidia*; *Bothriothorax*; *Dacus*; *Eurytoma*; *Filippia*; *Phloeothrips*; *Phloeotribus* (see *P. scarabaeoides*); *Saissetia* (*Lecanium*).
Oleander (*Nerium oleander*), *Aspidiotus hederae* intercepted on, in California, III. 117; scale-insects

on, in Pretoria, II. 353, 554, III. 749; scale-insects on, in U.S.A., I. 180, III. 23, 275, 357.
Oleander Scale (see *Aspidiotus hederae*).
Olearia haasti, *Aulacaspis pentagona* on, I. 222.
oleellus, *Prays*.
oleiperda, *Hylesinus*.
oleivorus, *Eriophyes*.
Olene pinicola, parasitised by *Trichogramma minutum* in U.S.A., III. 301.
Olenecamptus bilobus, on *Ficus*, etc., in Java, II. 534, 535.
olens, *Ocypus*.
oleracea, *Haltica*; *Phoma*; *Polia*; *Tipula*.
oleraceum, *Eurydema* (*Strachia*).
Oleron, Island of, *Otiorrhynchus sulcatus* on vines in, II. 229, 361, 421.
olesistus, *Aphelenchus*.
Olethreutes, in Vancouver, II. 676.
Olethreutes frigidana, on fruit in Russia, III. 43.
Olethreutes hebesana, bionomics of, in Canada and U.S.A., III. 659.
Olethreutes lacunana, III. 195.
Olethreutes (*Penthina*) *pruniana*, in Astrachan, III. 220; on apple in England, II. 563, III. 659; on fruit trees in France, III. 496.
Olethreutes rooana, on strawberry in Holland, III. 194.
Olethreutes schistaceana (see *Argyroploce*).
Olethreutes urticana, on strawberry in Holland, III. 194.
Olethreutes variegana (see *Argyroploce*.)
Olethrius tyrannus, on coconut in Solomon Islands and New Hebrides, II. 691; on coconut in South Sea Islands, II. 2.
Oligia (*Hadena*) *fractilinea* (Lined Corn Borer), in U.S.A., III. 475.
Oligosita comosipennis, parasite of sugar-cane leaf-hopper in Porto Rico, III. 26.
Oligosita giraulti (Vermilion Egg-parasite), parasite of froghoppers in West Indies, I. 116, 320, II. 60, 95, 460, 646.
Oligosita sanguinea, in Italy, III. 301.
Oligota oviformis, on citrus in California, I. 143.
olivacea, *Eublemma*.
olivana, *Lepidosaphes*.
Olive (*Olea chrysophylla*), pests of, in Algeria, I. 419, 420, II. 125, 349, III. 99; *Cicada cinctifera* on, in Arizona, III. 512; pests of, in California, I. 418, II. 114, 599, III. 151, 686; *Leucaspis riccae* on, in Egypt, I. 258; pests of, in Eritrea, II. 346, III. 431–433; pests of, in France, III. 10, 37, 257; pests of, in Italy, I. 380, 390, 391, II. 86, 196, 298, 633, 634, 698, III. 37, 55, 171, 705; pests of, in Palestine, II. 623; *Prays oleellus* on, in Portugal, I. 313, 314; *Lepidosaphes flava* on, in Tunisia, I. 167; pests of, in S. Africa, I. 279, II. 298, III. 431–433, 502; *Dacus oleae* imported on, into U.S.A., III. 454.
Olive Black Scale (see *Saissetia oleae*).
Olive Bug (see *Teleonemia australis*).
Olive Fly (see *Dacus oleae*).
Olive Moth (see *Prays oleellus*).
Olive Psylla (see *Euphyllura olivina*).
Olive Thrips (see *Phloeothrips oleae*).
Olive Twig Borer (see *Polycaon confertus*).
olivieri, *Aulacophora*.
olivina, *Chionaspis*; *Euphyllura*.
Olla abdominalis, ineffective in controlling walnut Aphids in California, II. 582; predaceous on *Tetranychus telarius* in U.S.A., III. 64; predaceous on walnut Aphids in U.S.A., III. 142.
Olla oculata, predaceous on Aphids in California, III. 760.
Omalus auratus, parasite of *Pteronus ribesii* in France, II. 622.
Omaseus vulgaris, predaceous habits of, in Switzerland, I. 345.
Omiodes accepta (see *Nacoleia*).
Omiodes blackburni (see *Phryganodes*).
omiodivorum, *Bracon* (*Macrodyctium*).
omissa, *Eleodes*.
ommatias, *Phlyctaenia*.
omnivora, *Diglochis*; *Liothula* (*Oecanthus*).
Omocestus haemorrhoidalis, bionomics of, in Russia, III. 636.
Omocestus ventralis, bionomics of, in Russia, III. 636.
Omophlus, on cereals in Russia, III. 46, 94.
Omophlus lepturoides, on maize in Russia, III. 226.
Omophlus pilicollis, on mustard in Astrachan, III. 638.
Omophorus stomachosus (Fig Weevil), on figs in Rhodesia, III. 618.
Omorgus, parasite of vine moths in France, I. 524.
Omorgus difformis, parasite of vine moths in Russia, III. 211; parasite of *Polychrosis botrana* in Tyrol, III. 497.

Omorgus ferrugineipes, parasite of *Polychrosis viteana* in U.S.A., III. 691.
Omorgus lugubrinus, parasite of *Phlyctaenodes sticticalis* in Russia, I. 535, III. 220.
Omorgus mutabilis, parasite of *Pieris brassicae* in Russia, III. 543.
Omorgus nolae, parasite of *Polychrosis viteana* in U.S.A., I. 113.
Omorgus phthorimaeae, sp. n., parasite of *Phthorimaea operculella* in U.S.A., III. 691.
Omorgus tortricidis, sp. n., parasite of *Polychrosis viteana* in U.S.A., III. 691.
Omphale metallicus, parasite of Lepidoptera in Hawaii, III. 681.
Omphalocera dentosa, in Connecticut, II. 184.
Oncideres amputator, in West Indies, I. 163.
Oncideres cingulata (Twig Girdler), on apple, persimmon, etc., in U.S.A., I. 54, III. 180.
Oncideres putator (Huisache Girdler), bionomics and distribution of, in U.S.A., III. 475.
Oncideres tessellatus, in Trinidad, I. 425.
Oncometopia lateralis, on maize and potatoes in Montana, III. 335.
Onconotus laxmani, in Russia, III. 401.
Oncopsis, on birches in Maine, III. 530.
Oncosperma filamentosus, attacked by *Coptotermes gestroi* in Java, I. 355.
Onielella (*Cryptus*) *formosa*, parasite of *Anaphe* in Africa, II. 530, 548.
Onions, pests of, in Britain, II. 8, 89, III. 747; pests of, in Canada, I. 400, II. 676, III. 70, 507, 551; *Hypopus spinitarsus* on, in Egypt, II. 505; pests of, in France, II. 542, 557, III. 1, 189; pests intercepted on, in Hawaii, III. 492; pests of, in Holland, I. 386, III. 200; *Agriotes lineatus* on, in Italy, III. 59; *Rhizoglyphus echinopus* on, in New South Wales, I. 512, 513; pests of, in Russia, I. 357, 498, II. 341, 373, 374, 425, III. 104, 148, 221, 543, 544, 641; pests of, in U.S.A., I. 40, 225, 324, 425, II. 161, 381, 537, 680, III. 150, 178, 359, 457, 566, 569, 625, 690; pests of, in West Indies, I. 181, 253, 263, III. 476, 477; not attacked by *Aphis rumicis*, II. 494.
Onion Fly (see *Hylemyia antiqua*).
Onion Maggot (see *Hylemyia antiqua*).
Onion Thrips (see *Thrips tabaci*).
Oniscus asellus, in Britain, II. 598; in Ontario, II. 491.
onobrychidis, Perrisia (*Contarinia*).
Onobrychis, Acyrthosiphon pisi on, in Russia, III. 703.
onobrychis, Aphis (see *Acyrthosiphon pisi*).
ononidis, Aphis; *Callipterus*; *Myzocallis*.
Ononis hircina, Acyrthosiphon on, in Russia, III. 702.
Ononis spinosus, Callipterus ononidis on, III. 749.
ononis, Siphonophora (see *Acyrthosiphon pisi*).
Onopordon, Eurygaster integriceps on, in Russia, I. 447.
Onopordon acanthium (Scotch Thistle), *Acidia heraclei* on, in France, III. 188; removal of, to control *Pegomyia hyoscyami*, III. 608.
onotrophes, Trypeta (see *T. cylindrica*).
Ontario, bionomics of *Blissus leucoptera* in, II. 469; flea-beetles of, I. 298, 299; forest pests in, II. 25, 231; fruit pests and their control in, II. 431-433, 512, III. 57, 77, 137, 293, 358, 407, 548; legislation regarding insect pests in, III. 71; locusts in, III. 368; *Merodon equestris* introduced into, I. 47; miscellaneous pests of, I. 140, 169, 379, 400-401, 403, 405, 406, II. 216-218, 491, 492, III. 18, 43, 72, 273, 369, 552, 732.
ontario, Pimpla.
onusta, Macronoctua.
onustus, Thomisus.
Ooencyrtus, parasite of *Datana integerrima* in U.S.A., I. 525.
Ooencyrtus atomon, parasite of *Dendrolimus pini* in Russia, II. 222.
Oophthora, I. 437.
Oophthora semblidis (see *Trichogramma*).
Oospora destructor, infesting *Bothynoderes punctiventris* in Russia, II. 179.
Ootetrastichus optabilis, imported into Hawaii, III. 758.
Ootheca bennigseni, on cotton in Africa, II. 2.
Ootheca mutabilis, on cotton in Africa, II. 2; on beans and cotton in E. Africa, I. 414, II. 579; on cotton, coffee, etc., in Nigeria, II. 106, 108, III. 166; on cotton, etc., in Nyasaland, II. 277.

opaca, Silpha.
opacicollis, Promecotheca.
opaculus, Hylurgops.
opalescens, Aegeria (*Sanninoidea*).
Opatrum, on tobacco in Sumatra and Java, I. **14, 111**; on tobacco in Rhodesia, I. **289**.
Opatrum aequale (see *Gonocephalum simplex*).
Opatrum crenatum, on sugar-cane in Mauritius, I. **31**.
Opatrum depressum, on coffee in Java, III. **589**.
Opatrum pusillum (see *Gonocephalum*).
Opatrum sabulosum, on vines in France, II. **608**; bionomics and control of, in Russia, I. **358, 485**, II. **50, 51, 172, 718**, III. **106, 221, 226, 342, 399, 543**; on tobacco in Sumatra, III. **203**; *Coccobacillus* infections in, I. **336**.
operculella, Phthorimaea.
Ophelosia, parasite of *Icerya purchasi* in California, III. **348**.
Ophideres fullonica (see *Othreis*).
Ophion antankarus (see *Henicospilus*).
Ophion bifoveolatum, parasite of *Lachnosterna* and *Galerucella* in Illinois, I. **528**.
Ophion luteus, parasite of *Euxoa segetum* in Russia, I. **462**, III. **536**.
Ophion mauritii, parasite of sugar-cane borers in Réunion, II. **215**; recorded in error for *Henicospilus antankarus*, III. **383**.
Ophion (*Henicospilus*) *purgatus*, parasite of cutworms in U.S.A., III. **371, 684**.
Ophion vulneratus, parasite of *Depressaria apicella* (*nervosa*) in Germany, I. **515**.
Ophionectria coccicola (White-headed Fungus), on scale-insects in Florida, II. **129**; in the Gold Coast, II. **142**; infesting scale-insects in West Indies, I. **76, 77**, II. **88**, III. **650**.
Ophisaurus, destroying *Dociostaurus maroccanus* in Russia, III. **243**.
Ophiusa, parasitised by *Trichogramma pretiosum* in Sumatra, I. **13**.
Ophiusa lienardi (see *Achaea*).
Ophonus (*Harpalus, Pardileus*) *calceatus*, on cereals and beet in Russia, I. **359**, II. **172**, III. **46, 67, 93, 601**; predaceous on *Bothynoderes punctiventris* in Russia, II. **179**.
Ophonus griseus, predaceous on *Bothynoderes punctiventris* in Russia, II. **179**.
Ophonus (*Harpalus*) *pubescens*, predaceous on *Bothynoderes punctiventris* in Russia, II. **179**; found in trap trenches, III. **138**.
ophthalmicus, Leucosomus (see *L. pedestris*).
Opilo, predaceous on *Sinoxylon sexdentatum* in France, III. **10**.
Opilo domesticus, predaceous on *Anobium striatum* in Sweden, II. **100**, III. **256**.
Opilo mollis, destroying vine moths in France, I. **524**, III. **211**; predaceous on *Apate*, II. **196**.
opimum, Lecanium.
opimus, Chrysomphalus.
opinator, Syrphus.
Opius, liberated in Hawaii, III. **412**; parasite of *Agromyza scutellata* in U.S.A., III. **133**; parasite of *Eucosma ocellana* in U.S.A., III. **584**; parasite of *Ceratitis capitata* in W. Africa, II. **316–317**; parasite of *Pegomyia hyoscyami*, II. **617**.
Opius africanus, parasite of *Dacus oleae* in S. Africa, III. **433**.
Opius africanus var. *orientalis*, parasite of *Dacus oleae* in S. Africa, III. **173, 433**.
Opius agromyzae, parasite of *Agromyza* spp. in U.S.A., II. **46**.
Opius (*Utetes*) *anastrephae*, sp. n., parasite of *Anastrepha* in Porto Rico, I. **390**.
Opius aridus, sp. n., parasite of *Agromyza pusilla* in U.S.A., I. **238**, II. **46**.
Opius brunneipes, sp. n., parasite of *Agromyza pusilla* in U.S.A., I. **238**, II. **46**.
Opius dacicida, parasite of *Dacus oleae* in S. Africa, III. **173, 433**.
Opius humilis, imported into Hawaii against *Ceratitis capitata*, II. **317**, III. **170, 289, 364, 412, 712, 739, 758**.
Opius nitidulator, parasite of *Pegomyia hyoscyami*, II. **617**.
Opius perproximus, imported into Hawaii against *Ceratitis capitata*, II. **317**.
Opius procerus, parasite of *Chortophila brassicae* in France, III. **1**.
Opius succineus, sp. n., parasite of *Agromyza* in U.S.A., I. **238**.
Opius suturalis, sp. n., parasite of *Agromyza pusilla* in U.S.A., I. **238**, II. **46**.
Opius utahensis, sp. n., parasite of *Agromyza parvicornis* in U.S.A., I. **238**.
Opogona (*Loxostoma*) (Sugar-cane Bud Moth), in Queensland, III. **364**.

Opogona aurisquamosa, parasitised by *Apanteles* in Hawaii, III. 682.
Opogona glycyphaga, sp. n., on sugar-cane in Queensland, III. 718.
Opomyza florum, bionomics of, in Russia, III. 640.
Oporabia autumnata, on Conifers in Britain, I. 119.
Oporabia dilutata, on forest trees in Britain, II. 378, 619, 620.
oppugnati, *Habrolepis*.
oppugnator, *Compsilura*.
oppugnatus, *Aspidiotus*.
optabilis, *Ootetrastichus*; *Paranagrus*.
optatus, *Horonotus*.
Opuntia (Prickly Pear), *Ceratitis capitata* on, in Bermuda, III. 171; scale-insects on, in California, II. 436; *Diaspis echinocacti* on, in Peru, III. 135; pests of, in U.S.A., III. 126, 475; relations of Cochineal insects to, I. 78, 79; (see Prickly Pear).
Opuntia anacantha, in S. Africa, II. 440.
Opuntia arborescens, *Disonycha varicornis* on, in U.S.A., I. 81.
Opuntia cochinelifera, *Dactylopius coccus* limited to, III. 126.
Opuntia dilleni, in India and Ceylon, III. 126.
Opuntia engelmanni, in Texas, III. 296.
Opuntia leptocaulis, *Disonycha varicornis* on, in U.S.A., I. 81.
Opuntia lindheimeri, juice of, as an adhesive in arsenical sprays, III. 295.
Opuntia monada, in S. Africa, II. 440.
Opuntia monocantha, *Dactylopius* (*Pseudococcus*) *capensis* and *D. indicus* introduced into Mauritius against, II. 612; insects recommended to be introduced into Queensland to destroy, III. 126; *Dactylopius* (*Coccus*) *indicus* introduced into S. Africa against, III. 503; *Dactylopius coccus* on, in S. Africa, II. 440.
Opuntia nigricans, in India, III. 126.
Opuntia tuna, *Ceratitis capitata* on, in Hawaii, I. 374; in Texas, III. 296; not a food-plant of *Dactylopius coccus*, II. 440.
opuntiae, *Asphondylia*; *Cecidomyia* (*Itonida*).
opuntiella, *Marmara*.
Orache, Garden (*Atriplex hortensis*), pests of, in France, I. 50.
oralis, *Chrysopa*.
Orange (*Citrus aurantium*), pests of, in Algeria, II. 228, 230, III. 102; pests of, in Argentina, II. 207, III. 694; pests of, in Asia Minor, II. 189; pests of, in Australia, II. 20, 705, III. 503, 653; pests of, in Brazil, II. 28, 173, 174, 175, III. 169; pests intercepted on, in California, II. 248, III. 420, 495, 558, 625, 626, 688, 690, 739; pests of, in E. Africa, II. 59, 571; *Ceratitis capitata* imported into England on, II. 238; pests of, in the Gold Coast, II. 672; pests of, in Hawaii, I. 374, II. 578, III. 29, 567; pests of, in India and Ceylon, I. 508, II. 151, III. 83, 300; introduction of parasites against pests of, in Italy, II. 86, 97; *Pulvinaria okitsuensis*, sp. n., on, in Japan, III. 127; seldom attacked by *Ceratitis capitata* in Madagascar, III. 276; pests of, in S. Europe, I. 43, 171, 297, 320, 354, II. 228, III. 102, 143, 744; scale-insects on, in Paraguay, III. 705; pests of, in Peru, I. 517, III. 135; *Prays citri* on, in the Philippines, II. 116; *Cydia pomonella* on, in Portugal, I. 313; scale-insects on, in Seychelles, I. 129; pests of, in Russia, III. 223; pests of, in S. Africa, I. 196, II. 654; pests of, in U.S.A., I. 149, 180, 264, 287, 325, 326, 383, 385, 418, II. 77, 247, 347, 435, 542, III. 121, 326, 357, 631, 653, 688; scale-insects on, in Venezuela, II. 628; pests of, in West Indies, I. 83, 165, 253, 389, II. 78, 130, 145, 311, III. 22, 73, 517, 518; *Papilio* spp. on, II. 310, 311, 569; fumigation of, I. 312, 313, 502; (see Citrus).
Orange Aphis (see *Myzus citricidus*).
Orange Butterfly (see *Papilio demodocus*).
Orange Codling Moth (see *Argyroploce leucotreta*).
Orange Fruit Fly (see *Trypeta ludens*).
Orange Maggot (see *Trypeta ludens*).
Orange, Mock (see *Murraya exotica*).
Orange Mussel Scale (see *Lepidosaphes beckii*).
Orange Red Scale (see *Chrysomphalus aurantii*).
Orange Scale (see *Chrysomphalus aurantii*).
Orange Snow Scale (see *Chionaspis citri*).
Orange-striped Oak Worm (see *Anisota senatoria*).
Orange Thrips (see *Scirtothrips citri*).
Orange Tortrix (see *Tortrix citrana*).

Orange, Wild, *Monacrostichus citricola* on, in the Philippines, II. 116.
orbiculus, Aspidimerus (*Cryptogonus*).
orbona, Agrotis.
orbonalis, Leucinodes.
orbus, Chilocorus.
Orchard Tent Caterpillar (see *Malacosoma americana*).
Orchestes (see *Rhynchaenus*).
Orchids, *Diaspis boisduvali* on, in Australia, III. 80; *Isosoma orchidearum* on, in Australia, II. 482; woodlice infesting, in Britain, II. 597, 598; pests of, in Br. Guiana, II. 417; *Trioza litseae* on, in Réunion, II. 216; pests of, imported into U.S.A., III. 117, 354, 455, 469, 626, 739; pests of, in U.S.A., III. 121, 354.
orchidearum, Isosoma.
orchilella, Bedellia.
Orcus chalybaeus (Steel-blue Ladybird), predaceous on *Saissetia oleae* in California, III. 150; introduced into Hawaii, III. 757; introduction of, into Italy, against Coccids, II. 86; in bait-traps for *Ceratitis capitata*, III. 568.
Orcus janthinus, III. 318; destroying *Coccus viridis* in Java, III. 647.
ordinatella, Acrocercops.
Oregon, insects pests from, imported into California, III. 420; Aphids in, I. 77, 241, 512, II. 32, 208, III. 141, 588; Coccinellidae of, I. 511; insect pests in, I. 130, 131, 133, 136, 177, 178, 340, 428, II. 159–161, 308, III. 77, 257–272, 758; use of insecticides in, II. 386–389.
oregonense, Macrosiphum.
oregonensis, Aphis; *Chalcophora*; *Lachnus.*
oregonis, Ips.
oreinum, Tetropium.
Orellia wiedemanni, on vegetable marrow in France, I. 504.
Oreodoxa, rhinoceros beetle on, in Seychelles, II. 568.
Oreodoxa oleracea (Cabbage Palm), *Pseudaonidum oreodoxae*, sp. n., on, in Ceylon, III. 168; *Schistocerca paranensis* on, in Trinidad, III. 679.
Oreodoxa regia (Royal Palm), *Rhynchophorus ferrugineus* on, in Straits Settlements, II. 99.
oreodoxae, Pseudaonidia.
Orgyia, parasitised by *Trichogramma semblidis*, I. 432.
Orgyia (*Notolophus*) *antiqua*, in orchards in Br. Columbia, II. 675; on roses in Holland, III. 513; on pines in Norway, III. 696; parasites of, in Russia, III. 227, 401, 640; bionomics of, in U.S.A., III. 268; imported into U.S.A., from Europe, III. 268, 355, 455, 469; effects of nicotine on, II. 50; not normally parasitised by *Sturmia scutellata*, II. 104.
Orgyia dubia, bionomics of, in Russia, III. 219, 221.
Orgyia gonostigma, bionomics of, on pears, etc., in Russia, I. 541, III. 225.
Orgyia postica, on tea, etc., in Ceylon, I. 88, II. 643, 644, III. 61; on tea, coffee and rubber in the Far East, II. 490, 491; on castor in India, III. 62; on *Hevea* in Java and Ceylon, II. 414.
Orgyia vetusta, on cotton in Zanzibar, III. 124.
orgyiae, Telenomus.
Oria (*Tapinostola*) *musculosa*, bionomics and control of, in Russia, II. 171, 197, 202, 319, 391, 392, 496, 526, 712, III. 4, 15, 52, 66, 68, 110, 111, 229, 338, 339, 403, 440, 443, 486, 540, 600, 602, 635.
orichalcea, Phytometra (*Plusia*).
orichalcocilliella, Diatraea.
Oriental Pear (see *Pyrus sinensis*).
orientale, Acyrthosiphon (*Macrosiphum*).
orientalis, Agelastica; *Anomala*; *Aspidiotus*; *Bruchocida*; *Chelonus*; *Coccophagus*; *Dorylus*; *Elasmus*; *Mataeus*; *Neanastatus*; *Periplaneta*; *Trichius*; *Vespa.*
Oriole, destroying noxious insects, I. 226, 345, II. 148.
Oriolus galbula, destroying *Dendrolimus pini*, II. 148.
Ormenis, on sugar-cane in Porto Rico, I. 185.
ormerodi, Amblyspatha.
ormerodis, Aphelenchus.
Ormyrus, parasite of gall-flies in California, I. 36.
Ormyrus striatus, on olive in Africa, III. 432.
ornatum, Eurydema (*Pentatoma, Strachia*); *Trogoderma.*
ornatus, Anatragus; *Bruchus*; *Cremastus.*
ornithogalli, Prodenia.
Ornithology, Economic (see Birds).
Ornix (see *Parornix*).
Orobanchia cumana, Phytomyza orobanchiae feeding on, in Astrachan, III. 222.
Orobanchia ramosa, Phytomyza orobanchiae feeding on, in Astrachan, III. 172, 222.
orobanchiae, Phytomyza.
Orobena (see *Evergestis*).
Orophus rhombifolius, bionomics of, in California, III. 653.

Oroxylon indicum, attacked by *Coptotermes gestroi* in Java, I. 355.
orphana, Paropsis.
Orsodacna atra, on fruit trees in Missouri, III. 181.
Orthacanthacris (*Acridium*) *aegyptius*, *Coccobacillus* infections in, I. 336; on cotton, etc., in Turkestan, II. 313, 509.
Orthezia insignis (Lantana Bug), on citrus, etc., in Br. Guiana, II. 417; on sugar-cane in Br. Guiana, I. 522; in E. Africa, II. 429; on chrysanthemums in England, III. 747; scarce in Montserrat, II. 87; in Peru, III. 135; on *Lantana camara* in Réunion, II. 216; on *Coleus* in U.S.A., III. 709.
Orthezia praelonga (Croton Bug), on crotons in Br. Guiana, II. 416, 417.
Ortheziola vejdovskyi, in Scotland, I. 243.
Orthizema, parasite of *Polychrosis viteana* in U.S.A., I. 113.
Orthizema atriceps, parasite of *Chrysopa* in South Carolina, III. 25.
Orthocephalus (*Capsus*) *saltator*, on chicory in France, I. 256.
Orthocephalus vittipennis, on hay in Russia, III. 479.
Orthocraspeda trima, on cacao in Java, III. 662.
orthogonia, Porosagrotis.
ortholobis, Chionaspis.
Orthorrhinus klugi, on vines and wattle in Victoria, I. 195.
Orthosoma, on Conifers in U.S.A., III. 579.
orthospina, Rhodites.
Orthotylus flavosparsus, disseminating fire-blight in U.S.A., II. 288, III. 465.
Orthotylus marginalis, on apples in Britain, II. 563, 659; on fruit trees in Norway, III. 107.
Oryctes (Coconut Beetle), on coconut in the Belgian Congo, II. 422; on coconut in E. Africa, II. 557; legislation against, in Malaya, II. 422; on palms, in Madagascar and Réunion, II. 99; on sugar-cane in Mauritius, II. 46.
Oryctes boas, on palms in Africa, II. 99; on coconut in Zanzibar, III. 124.
Oryctes cristatus, on coconut in E. Africa, I. 414.
Oryctes monoceros, on palms in Africa, II. 99; on coconut in E. Africa, I. 414, III. 32, 124.
Oryctes nasicornis, on coconut in Java, III. 713; in Russia, II. 110, 714.
Oryctes nasicornis var. *grypus*, on vines in Sicily, III. 112.
Oryctes preussi, on coconut in South Sea Islands, II. 2.
Oryctes rhinoceros (Rhinoceros Beetle), I. 345; control of, on coconut in Ceylon, III. 62, 490, 754; on coconut in Far East, II. 490, 690; bionomics and control of, in Samoa, II. 7, 26–28, 29, 30, 99, 267, 690; on coconut in South Sea Islands, II. 2; legislation against, in Zanzibar, I. 235; distribution of, II. 98; list of palms damaged by, II. 99.
Oryctes tarandus, on sugar-cane in Mauritius, I. 31, II. 612, III. 730.
Oryctoderes latitarsis, on coconut in South Sea Islands, II. 2.
oryctophaga, Scolia.
Oryza sativa (see Rice).
oryzae, Calandra; *Delphax*; *Latheticus*; *Tarsonemus.*
Osage Orange (see *Maclura aurantiaca*).
osborni, Aspidiotus.
Oscinella (*Oscinis*) *carbonaria*, on wheat in Manitoba, I. 412.
Oscinella coffeae, on coffee in E. Africa, I. 415.
Oscinella (*Oscinis*) *frit* (Frit Fly), in Austria, II. 482, 590; on cereals in Belgium, II. 176; on cereals in Britain, I. 434, II. 8, 564, 639, 655; on cereal crops in Denmark, III. 245, 698; on oats in France, III. 428; in Germany, II. 500; on cereals in Holland, I. 386; bionomics and control of, in Russia, I. 214, 364, 398, 448, 484, 490, 497, II. 5, 35, 37, 43, 172, 198, 201, 341, 343, 350, 352, 370, 371, 372, 648, III. 41, 75, 92, 98, 128, 147, 148, 183, 200, 203, 206, 226, 230, 235, 340, 398, 401, 480, 481, 544, 600, 635, 640.
Oscinella frit var. *pusilla*, on oats in France, III. 428; bionomics of, in Russia, I. 399, 491, II. 43, 47, III. 480.
oscinidis, Polyscytus.
Oscinis, on wheat in Manitoba.
Oscinis carbonaria (see *Oscinella*).
Oscinis devastatrix, on oats in France, III. 428.
Oscinis frit (see *Oscinella*).
Oscinis theae (Tea Leaf-miner), in Ceylon, II. 644; parasitised by *Closterocerus insignis*, III. 443.
Osiers, *Phyllodecta* (*Phratora*) *vitellinae* on, in Britain, I. 433; pests of, in France, I. 333, II. 290; pests of, in Germany, II. 501, 642, 643; pests of, in

Holland, I. 385, 386; not attacked by *Lymantria dispar* in U.S.A., III. 669; (see also Willow).
Osmia, Trichodes alvearius in nests of, III. 40.
Osmia bicornis, Scolia punctata entering cells of, in U.S.A., I. 42.
Osmoderma eremita, in Russia, II. 110.
ostreaeformis, Aspidiotus; *Diaspis* (see *Epidiaspis piricola*).
Othreis (*Ophideres*) *fullonica*, on citrus in Far East, II. 490.
Otiorrhynchus, in vineyards in Greece, I. 409; on cyclamen in Ireland, II. 656; on vines in the Palatinate, II. 539; in South Australia, II. 584; on vines in Russia, II. 495, III. 477, 602, 701.
Otiorrhynchus asphaltinus, in Crimea II. 495.
Otiorrhynchus clavipes, on fruit trees in France, II. 449.
Otiorrhynchus cribricollis, bionomics of, on lucerne in Italy, II. 181; in S. Australia, II. 584, III. 527.
Otiorrhynchus ligustici, on vines in France, II. 420, 608; on vines, etc., in Italy, II. 181, III. 112; bionomics of, on lucerne, etc., in Russia, I. 527, II. 43, 395, 465, 668, III. 41, 342, 393, 480, 542, 543, 601, 606.
Otiorrhynchus nigritus (see *O. tristis*).
Otiorrhynchus ovatus (Strawberry Root Weevil), bionomics and control of, in Canada and U.S.A., I. 90, 92, 93, 413, II. 183, 677, III. 7, 425.
Otiorrhynchus picipes (see *O. singularis*).
Otiorrhynchus raucus, on fruit trees in France, II. 449.
Otiorrhynchus rotundatus, on *Syringa vulgaris* in Germany, I. 121; on privet in Russia, III. 610.
Otiorrhynchus rugifrons, on strawberries in Oregon, I. 132.
Otiorrhynchus singularis (*picipes*), on fruit trees in Britain, I. 388, II. 8, 563, 656, III. 159, 676; on fruit trees in France, II. 449; on horse-radish, etc., in Holland, I. 385, III. 198.
Otiorrhynchus sulcatus, I. 92; on vines in Britain, I. 388, II. 563; food-plants of, in Connecticut, II. 183; bionomics of, in France, I. 234, II. 360, 361, 449, 608; food-plants of, in Holland, I. 385, II. 641; on vines in Italy, III. 112; on vines in Oleron, II. 229, 360, 361, 421; in Oregon, I. 132; in Vancouver, II. 677.
Otiorrhynchus tauricus, on vines in Crimea, II. 354.
Otiorrhynchus tenebricosus, on apples in England, II. 563.
Otiorrhynchus tristis, on vines in Italy, III. 112.
Otiorrhynchus turca, in Italy, II. 181; on vines in Russia, II. 495, 669, III. 478.
Ottawa, pests in, I. 298, 299, 400, 406, 407, II. 306, 382, 491, III. 43, 72.
ovata, Brachys; *Chalcis*.
ovato-oblongus, Pemphigus.
ovatus, Exochus; *Otiorrhynchus*.
ovi, Scelio.
oviformis, Oligota.
ovisugosus, Cirrospilus.
Owls, destroying insects, I. 306, II. 60, 222, III. 392.
Ox-eye Daisy (see *Chrysanthemum leucanthemum*).
Oxya velox, on rice and sugar-cane in S. India, II. 67.
oxyacanthae, Campoplex.
Oxybelus quatuornotatus, attacking *Hylemyia antiqua* in Wisconsin, III. 569.
Oxycarenus albidipennis, on cotton in Zanzibar, III. 125.
Oxycarenus amygdali, sp. n., on peach in Transvaal, III. 167.
Oxycarenus collaris, on cut grasses in Russia, III. 479.
Oxycarenus dudgeoni, on cotton in Africa, II. 2; on cotton in S. Nigeria, II. 106, 107, III. 165.
Oxycarenus exitiosus, on cotton in Africa, II. 2.
Oxycarenus gossypinus, on cotton in Africa, II. 2; on cotton in Uganda, I. 49, II. 59, 592, III. 752.
Oxycarenus hyalinipennis (Cotton-seed Bug), on cotton in E. Africa, I. 246, 415, II. 580; on cotton in Egypt, III. 752; on cotton in Uganda, I. 49, II. 59, 592, III. 752; on cotton in Africa, II. 2.
Oxycarenus laetus, on cotton in Ceylon, II. 644.
Oxycarenus lectularis (Coon Bug), on strawberry, etc., in Australia, II. 584, III. 366.
Oxycephala chalybeipennis, on coconut in South Sea Islands, II. 2.
oxycoccana, Cecidomyia (see *Perrisia vaccinii*).
Oxygrapha (*Teras*) *contaminata*, on fruit trees in France, III. 496.

Oxygrapha holmiana, on fruit trees in France, III. **496.**
Oxygrapha (*Acalla*) *schalleriana*, on strawberries in Holland, III. **194.**
Oxyptilus periscelidactylus (Grape Plume Moth), in Connecticut, III. **373.**
Oxyrhachys tarandus, food-plants of, in Africa and India, II. **242.**
Oxysternus maximus, destroying *Rhynchophorus palmarum* in Trinidad, I. **285.**
Oxythyrea, on apple in Russia, III. **183.**
Oxythyrea cinctella, not attracted by blue paper, II. **44**; on fruit in Turkestan, II. **714.**
Oxythyrea funesta (*stictica*), in Russia, II. **110**, III. **47**, **222**, **399**, **481**, **607**; food-plants of, in France, II. **448**; parasitised by *Scolia quadripunctata* in Russia, II. **260**; on vines in Italy, III. **112**, III. **607.**
Oxythyrea stictica (see *O. funesta*).
Oyster-shell Scale (see *Lepidosaphes ulmi*).

P.

pabulinus, *Lygus*.
pabulorum, *Lygus*.
Pachira aquatica, branches of, as a bait for *Stirastoma depressum* in W. Indies, III. **661.**
Pachnoda flaviventris, in S.Rhodesia, III. **174.**
Pachnoda impressa, in S. Rhodesia, III. **174.**
Pachnoda rufa, in S. Rhodesia, III. **174.**
Pachnoda sinuata, on coffee in B. E. Africa, II. **570.**
Pachybruchus verticalis, sp. n., on cotton in Peru, III. **273.**
Pachydissus hector, on coffee in E. Africa, I. **414.**
Pachydissus sartus, bionomics of, in Turkestan, II. **75**, **200**, **714.**
Pachylarthrus smaragdinus, parasite of *Acidia heraclei* in France, III. **188.**
Pachymerus chinensis (see *Bruchus*).
Pachymerus (*Caryoborus*) *luteomarginatus*, imported into E. Africa from Brazil, I. **247.**
Pachymerus nucleorum, on *Elaeis guineensis* in Br. Guiana, III. **591.**
Pachynematus montanus, on pines in Germany, I. **371**, **372.**
Pachyneuron, hyperparasite of *Microterys* in California, I. **309**; hyperparasite of *Rhopalosiphum ribis*, II. **81**; parasite of *Brachycolus noxius* in Russia, III. **308.**
Pachyneuron allograptae, parasite of Syrphids in Canada, III. **25.**
Pachyneuron aphidis, hyperparasite of *Aphis pomi*, II. **79.**
Pachyneuron hammari, sp. n., parasite of *Cydia pomonella* in New Mexico, II. **307.**
Pachyneuron longiradius, sp. n., parasite of *Leucopis* in Eritrea, III. **432.**
Pachyneuron micans, parasite of *Aphis avenae* in U.S.A., II. **697.**
Pachypappa reaumuri, bionomics of, in Britain, III. **501**, **633.**
Pachypappa vesicalis, food-plants of, in Russia, III. **608.**
Pachypsylla celtidis-mamma, food-plants of, near Washington, III. **567.**
Pachyrrhina, a pest in Austria, II. **429.**
Pachytalia (*Psyche*) *unicolor*, III. **400.**
Pachytoma gigantea, on Mlanje cypress in Nyasaland, II. **277.**
Pachytychius mungonis, sp. n., on cowpea in India, III. **444.**
Pachytylus migratorius (see *Locusta*).
Pachytylus migratorioides (see *Locusta*).
Pachytylus nigrofasciatus (see *Oedaleus*).
Pachytylus sulcicollis (see *Locusta pardalina*).
Pachyzancla bipunctalis, food-plants of, in Porto Rico, III. **477.**
Pachyzancla periusalis, food-plants of, in Porto Rico, III. **477.**
pacifica, *Aegeria* (*Sanninoidea*) (see *A. opalescens*).
pacificus, *Hemerobius*.
packardi, *Asterochiton*; *Melanoplus*.
paczoskii, *Acyrthosiphon gossypii*.
Padauk (see *Pterocarpus indicus*).
Paddle-legged Bug (see *Leptoglossus*).
Paddy (see Rice).
Paddy Stem-borer (see *Schoenobius bipunctifer*).
padellus, *Hyponomeuta*.
padi, *Aphis*; *Priophorus* (*Cladius*) *Eriophyes*.
Padraona dara, on rice and sugarcane in Far East, II. **489.**
Paectes (*Ingura*) *subapicalis*, on *Shorea robusta* in India, III. **723.**
paeoniae, *Pseudaonidia*.
pagana, *Arge* (*Hylotoma*); *Haltica*.
pagensteckeri, *Adoretus*.
Painted Bug (see *Bagrada picta*).
Palaconeura evanescens, sp. n., in Tasmania, III. **361.**
Palaconeura interrupta, sp. n., in Tasmania, III. **361.**
Palaconeura turneri, sp. n., in Tasmania, III. **631.**

Palaeacrita vernata (Spring Canker Worm), bionomics and control of, in Canada and U.S.A., I. **281**, II. **247, 359, 457**, III. **70, 137, 372, 380.**
Palaeococcus (Cuban Cactus Coccid), on prickly pear, III. **126.**
Palaeococcus fuscipennis, on pines in Germany, I. **373.**
Palaeococcus morrilli, in Arizona, II. **308.**
Palatinate, Coccidae in, II. **98**; vine pests and their control in, II. **452, 538, 586, 632, 633, 682.**
Pale Brindled Beauty Moth (see *Phigalia pedaria*).
Pale-striped Flea-Beetle (see *Systena blanda*).
palealis, Phlyctaenodes (*Botys*).
Palestine, *Apate monacha* in, II. **196**; olive pests in, II. **623.**
Paliurus australis, Aulacaspis pentagona on, I. **222.**
Pallasiella (*Arcyptera, Stethophyma*) *turcomana*, in Russia and Turkestan, II. **509**, III. **636.**
pallens, Cysteochila; *Leucania*; *Schistocerca*; *Spilochalcis.*
palliatus, Doryctes (*Ischiogonus*); *Hylastes*; *Tanymecus.*
pallida, Anomala.
pallidus, Anchonocranus oleae.
pallidicornis, Bruchus; *Narnia.*
pallidipennis, Labidostomis.
pallidum, Eriosoma (*Schizoneura, Tetraneura*).
pallidus, Gomphocerus; *Hesperophanes*; *Pemphigus*; *Tarsonemus*; *Theutras.*
pallipes, Agonoderus; *Pristiphora*; *Pteromalus.*
palmatus, Tenuipalpus.
palmeri, Icerya.
Palms, pests of, in Uganda and E. Africa, I. **49**, II. **146, 429**; pests of, in S. Africa, II. **299, 300**; scale-insects on, in Australia, III. **80, 503**; *Hemichionaspis aspidistrae* on, in Ceylon, III. **83**; *Diaspis boisduvali* on, in Peru, III. **135**; *Rhynchophorus ferrugineus* on, in the Philippines, I. **314**; *Pseudococcus nipae* on, in St. Vincent, III. **411**; rhinoceros beetle on, in Seychelles, II. **567**; spinning mites on, in greenhouses in Sweden, III. **253**; pests of, in U.S.A., II. **247**, III. **349, 566**; list of, attacked by *Oryctes rhinoceros*, II. **99**; pests imported on, into U.S.A., III. **117, 355, 469, 494, 513, 548, 558, 626, 690**; weevil intercepted in Hawaii on, from Cuba, III. **657**; (see *Cocos, Elaeis, Phoenix*, etc.).
Palm, African Oil (see *Elaeis guineensis*).
Palm, Coconut (see *Cocos nucifera*).
Palm, Doum (see *Hyphaene guineensis*).
Palm, Guadaloupe Island (see *Erythea edulis*).
Palm Leaf-roller (see *Nacoleia blackburni*).
Palm, Sago (see *Cycas revoluta*).
Palm Weevil (see *Rhynchophorus*).
palmae, Aspidiotus.
palmarum, Corone; *Rhynchophorus.*
Palmer Worm (see *Dichomeris ligulella*).
palmeri, Coenopaeus; *Icerya.*
Palomena prasina, bionomics of, on wheat, etc., in Russia, III. **45, 342.**
Palorus melinus, I. **293**; on cotton in Africa, II. **2.**
Palorus ratzeburgi, on cotton in Africa, II. **2.**
Palpares libelluloides, destroying vine-moths in Russia, III. **211.**
Paltodora similiella, on *Helianthus lenticularis* in Colorado, III. **753.**
Paltothyreus tarsatus, destroying termites in Nigeria, III. **165.**
paludosa, Tipula.
palustris, Lepyrus.
Pammene rhediella, on apples in Russia, I. **539**; distribution of, in Europe, II. **419.**
Pammene theristis, on *Shorea robusta* in India, III. **722.**
pammon, Papilio (see *P. polytes*).
Pamphila, on sugar-cane in Br. Guiana, I. **521.**
Pamphilius dentatus, sp. n., on blackberries in Connecticut, I. **53, 69, 181.**
Pamphilius (*Lyda*) *nemoralis* (see *Neurotoma*).
Pamphilius persicum, I. **69.**
Panama, *Tomaspis lepidior* on sugar cane in, II. **62**; *Icerya zeteki*, sp. n., from, II. **253**; *Melittia satyriniformis* in, III. **510**; new species of *Franklinothrips* from, III. **566.**
Panama Wood (see *Quillaia saponaria*).
pancrati, Brithys.
Pandanus (Screwpine), *Archon centaurus* on, in Gold Coast, II. **142**; not attacked by *Pseudococcus filamentosus* in E. Africa, II. **146**; *Promecotheca varipes* on, in Australia, III. **27**; *Chrysomphalus aurantii* intercepted on, in California, III. **558.**
Pandanus odoratissimus, scale-insects on, in Ceylon, III. **167.**
Pandanus utilis, Aspidiotus destructor on, in E. Africa, II. **429.**

pandava, Euchrysops (*Catochrysops*).
Pandemis (see *Tortrix*).
pandora, Chalcis.
panicea, Sitodrepa (*Anobium*).
panici, Aspidiotus.
Panicum (Crab-grass), *Aphis maidiradicis* on, in Illinois, I. **124**; *Agromyza* spp. on, in Canada, I. **238**.
Panicum barbinode (Para Grass), pests of, in Porto Rico, I. **181**, **343**, III. **556**, **674**.
Panicum bulbosum, not attacked by *Aphis avenae* in U.S.A., II. **696**.
Panicum crus-galli, Aphis setariae on, in Colorado, III. **351**; *Prosopothrips cognatus* on, in U.S.A., III. **577**, **578**.
Panicum laevifolium, Toxoptera graminum on, in S. Africa, II. **153**.
Panicum miliaceum, Diabrotica duodecimpunctata on, in U.S.A., I. **430**.
Panicum muticum, Laphygma frugiperda on, in Br. Guiana, II. **520**.
Panicum uncinatum, scale-insects on, in Ceylon, III. **755**.
Panicum virgatum, not attacked by *Aphis avenae*, in U.S.A., II. **696**.
Paniscus geminatus, parasite of Lepidoptera in U.S.A., II. **132**, III. **369**, **552**.
Paniscus gracilipes, parasite of *Euxoa segetum* and *Feltia exclamationis* in Russia, II. **212**.
Paniscus melanocotis, parasite of sugar-cane borers in Réunion, II. **215**.
paniscus, Anthrax.
Panolis flammea (Pine Moth), on pines in Britain, I. **120**; bionomics of, in Austria, II. **482**, **483**, **484**; bionomics of, in Russia, III. **49**, **217**, **398**; parasites of, II. **215**, **270**, III. **217**, **249**.
Panolis griseovariegata (see *P. flammea*).
Panolis piniperda (see *P. flammea*).
Pansies, *Apocellus sphaericollis* on, in U.S.A., III. **550**; *Hoplocampa canadensis* on, in Canada, III. **551**.
Pantala flavescens, believed to prey on *Dacus cucurbitae* in Hawaii, III. **29**.
pantherinus, Amerrhinus.
Pantomorus (*Aramigus*) *fulleri* (Fuller's Rose Beetle), on citrus, etc., in California, II. **116**, **438**, III. **419**, **622**, **738**; bionomics of, in Italy, II. **346**, **347**.
Panzeria, parasitising Lepidoptera, II. **528**.
Panzeria rudis, parasite of *Dendrolimus segregatus* in Russia, II. **223**.
panzeri, Amblyteles.
Papaipema cataphracta, on tomatoes in Ontario, II. **491**.
Papaipema nebris, on potato and tomato in U.S.A., II. **160**, III. **373**.
Papaipema nitela (see *P. nebris*).
Papaver (see Poppy).
papaveris, Aphis (see *A. rumicis*).
Papaw (Papaya) (*Carica papaya*), pests of, in Uganda and E. Africa, I. **246**, II. **59**; pests of, in Australia, II. **20**, III. **167**; Trypetidae intercepted on, in California, III. **494**; not attacked by *Helopeltis* in Gold Coast, II. **671**; fruit-flies on, in Hawaii, I. **374**, III. **29**, **163**; fruit-flies on, in Java, III. **3**; *Aulacaspis pentagona* on, in Seychelles, I. **129**; *Eurytrachelus pilosipes* on, in Solomon Islands, II. **689**; pests of, in West Indies, II. **533**, III. **80**; pests of, in U.S.A., III. **81**, **709**.
Papaya Fruit Fly (see *Toxotrypana curvicauda*).
Papediaecetes campestris (Prairie Sharp-tailed Grouse), destroying grasshoppers in Canada, III. **249**.
Paper Birch, *Calaphis betulaecolens* on, in California, III. **85**.
Papilio aegus, on citrus in Australia, II. **311**.
Papilio ajax, on papaw, in U.S.A., III. **709**.
Papilio anchisiades, on citrus in Br. Guiana, I. **130**, II. **569**.
Papilio andraemon, on citrus in Florida and Cuba, II. **311**.
Papilio clytia, on camphor in Ceylon, II. **597**.
Papilio cresphontes, on citrus in North America, II. **311**.
Papilio demetrius, on citrus in China and Japan, II. **311**.
Papilio demodocus, on citrus in Africa, I. **49**, **415**, II. **310**, **571**, III. **125**, **650**.
Papilio demoleus, on citrus in India, I. **279**, II. **311**, **487**; on citrus in Far East, II. **490**.
Papilio feisthameli, on fruit trees in Barbary, III. **427**.
Papilio lankeswara, on camphor in Ceylon, II. **597**.
Papilio machaon, on fennel in France, I. **68**; in Russia, III. **400**.
Papilio memnon, on citrus in Malay Archipelago, II. **311**; on citrus in Far East, II. **490**.
Papilio pammon (see *P. polytes*).
Papilio podalirius, control of, on fruit trees in Russia, III. **46**, **225**, **397**, **400**.

Papilio polytes, on citrus in India and Sunda Islands, II. **311, 487**; on citrus in Far East, II. **490**.
Papilio polyxenes (Celery Caterpillar), on parsley in Canada, III. **551**.
Papilio thoas, on citrus in Florida and Cuba, II. **311**.
Papilio xuthus, on citrus in China and Japan, II. **311**.
papillosus, Margarodes.
Papua depressella (*Polyocha saccharella*), on sugar-cane in India, I. **169**, III. **145**.
papuana, Promecotheca.
Para Grass (see *Panicum barbinode*).
Para Rubber (see *Hevea brasiliensis*).
Paracalocoris colon, on fruit trees in Canada and U.S.A., I. **154, 406**, II. **135**, III. **358**.
Paracalocoris scrupeus, on wild grape in New York, II. **135**.
Paracleutus cimiciformis, on grain in Russia, II. **171**.
Para-dichlorobenzene, value of, as an insect fumigant, III. **375**.
paradoxa, Chaetellipsis.
Paraffin, against wood-borers, I. **261**, III. **256**; injurious effect of, on bark of trees, III. **346**; and sand, against *Plutella maculipennis*, III. **551, 746**; value of, as an addition to alkaline sprays, III. **460**.
Paraffin Emulsion, cost of, II. **617**; as an insecticide, III. **284**; against citrus pests, III. **444**; against *Chermes*, I. **388**, III. **599**; (see Kerosene and Petroleum).
Paraffin Jelly, against Aphids, I. **78**, II. **619**.
Paragrotis ochrogaster (see *Euxoa*).
Paraguay, scale-insects on oranges in, III. **705**.
Paragus borbonicus, predaceous on *Aphis gossypii* in S. Nigeria, II. **107**, III. **164**; predaceous on Aphids in French Sudan, II. **396, 631**.
Paragus longiventris, predaceous on *Aphis gossypii* in Nigeria, III. **164**; predaceous on Aphids in French Sudan, II. **396, 631**.
Paragus serratus, predaceous on Aphids in French Sudan, II. **396, 631**.
Paralecanium expansum, on *Ficus macrophylla* in Australia, III. **653**.
Paralechia pinifoliella, on *Pinus banksiana* in Canada, I. **407**.
Paraleptomastix abnormis, sp. n., parasite of *Pseudococcus citri* in Sicily, III. **633**.
Paraleurocerus bicoloripes, sp. n., parasite of *Lithocolletis* in Massachusetts, III. **724**.
Paraleurodes perseae (Waxy or Bat Whitefly), on citrus in Florida, III. **22**.
Paralipsa modesta, III. **411**.
parallela, Tiphia.
parallelogrammus, Dionychus.
parallelopipedus, Dorcus.
parallelum, Elaphidion.
Paranagrus optabilis, III. **26**; imported into Hawaii, III. **758**.
Paranagrus perforator, imported into Hawaii, III. **758**.
Paranaph, composition and use of, II. **697**.
Parandra, on coniferous and hardwood trees in U.S.A., III. **579**.
Parandra brunnea, and its control in U.S.A., III. **545, 671, 672**.
paranensis, Schistocerca.
Paranthrene (*Sciapteron*) *tabaniforme*, on poplar in Russia, II. **718**, III. **220**.
Paraphelinus tomaspidis, parasite of *Tomaspis saccharina* (*varia*) in Trinidad, II. **495**.
Parapleurus alliaceus, in Astrachan, II. **716**.
Paraptochus sellatus, on fruit trees in Oregon, III. **271**.
Parasa, on coffee in Uganda, II. **591**, III. **752**.
Parasa chloris (see *Euclea indetermina*).
Parasa infuscata, on cotton in Nigeria, III. **164**.
Parasa lepida (Blue-striped Nettle Grub), bionomics of, in Ceylon, II. **654**; on tea and coffee in Far East, II. **490**; on cacao, in Java, III. **662**.
Parasa vivida, on coffee in Nyasaland, II. **277**.
Parasia aestivella (see *Metzneria lappella*).
Parasierola, parasite of *Gelechia gossypiella* in Hawaii, III. **681**.
parasitica, Eudothia.
Parasitus (*Gamasus*) *coleoptratorum*, in California, II. **303**.
Parasol Ant (see *Atta cephalotes*).
Parastichtis (*Hadena*) *arctica* (Yellow-headed Cutworm), on vegetables, etc., in Canada, II. **24**, III. **629**.
Parastichtis monoglypha, caught in troughs with molasses in Russia, III. **639**.
Paratetranychus longipes, III. **253**.
Paratetranychus pilosus, bionomics of, in Sweden, III. **252-254**; on fruit trees in Russia, III. **108, 223**; on fruit trees in Canada and U.S.A., III. **358, 552, 566**.
Paratetranychus pratensis, III. **253**.

Paratetranychus simplex, food-plants of, in California, II. 707; III. 253.
Paratetranychus ununguis, on *Picea remonti* in Holland, III. 201; control of, on pine in Scandinavia, III. 252, 253, 435, 696.
Paratimia conicola, sp. n., on *Pinus attenuata* in U.S.A., III. 546.
parcus, *Archarias*.
pardalina, *Carpomyia*; *Locusta*.
Pardileus calceatus (see *Ophonus*).
Paremydica insperata, in kola nuts in Nigeria, III. 166.
parenthesis, *Hippodamia*.
Parerynnia vibrissata (see *Erynnia*).
Parexorista cheloniae (see *Carcelia*).
Parexorista lucorum, parasite of *Lymantria dispar* in Crimea, I. 481.
parialis, *Choreutis*.
pariana, *Hemerophila* (*Choreutis*, *Simaethis*).
Parietaria officinalis, *Aphis urticaria* on, in England, III. 633.
Paris (Schweinfurt) Green, in sprays, I. 288, 301, 341, 347, 352, 366, 367, 381, 386, II. 19, 34, 36, 53, 54, 94, 249, 357, 373, 459, 509, 537, 560, 565, 566, 573, 623, 626, 627, 700, 705, 717, III. 86, 152, 360, 371, 404, 457, 508, 605, 607; in poisoned baits, formulae for, I. 84, 155, 194, 216, 287, 355, 453, 473, II. 24, 118, 159, 211, 249, 265, 302, 336, 344, 361, 372, 381, 448, 488, 491, 519, 565, 614, 629, 680, 694, III. 20, 36, 78, 301, 327, 411, 565, 575, 585, 620, 649; as a dusting powder, I. 42, 207, 300, 329, II. 236, 465, 598, 645, 692, III. 120, 165, 390, 551, 581, 761; chemical composition of, II. 37, 546, 559, III. 325, 645; effects of, on foliage, I. 207, 329, 352, 418, II. 92, 286, 560, 602, 626, III. 514, 645; methods of increasing adhesiveness of, I. 300, 538, 548, III. 295; poisoning soil with, III. 223; cost of, II. 560, 566; test for adulteration of, II. 559; compared with arsenicals, I. 418, III. 13, 21, 602, 645; not to be used with tobacco extract or lime-sulphur, II. 562; substitutes for, III. 108; result of mixing with other insecticides, III. 734; dangers of using, III. 496; and ammonia (azurgreen), III. 402; and Bordeaux mixture, II. 92, 274, 389, 459, III. 177; and lead arsenate, III. 195, 469; and lime, formulae for, I. 42, 212, 219, 232, 288, 298, 301, 329, 347, 361, 367, 394, 395, 396, 440, 479, 538, 543, II. 3, 4, 19, 53, 54, 142, 162, 223, 236, 249, 262, 357, 369, 373, 374, 533, 573, 614, 615, 626, 641, 642, 647, 669, 700, 717, III. 34, 50, 76, 106, 205, 310, 347, 360, 363, 390, 397, 404, 472, 483, 534, 536, 599, 611, 641; and sal-ammoniac, I. 492, II. 54, 265, 626, III. 34, 129, 243, 602, 642.
Parkia, not a satisfactory shade tree for *Sorghum* in French Sudan, II. 631.
parksi, *Chrysocharis*.
Parlatoria blanchardi, on date palms in U.S.A., I. 180, 218, 518, III. 84, 512; imported into U.S.A., from Hawaii, II. 461.
Parlatoria cinnamoni, sp. n., on cinnamon in Ceylon, III. 755.
Parlatoria destructor, on apple in Australia, II. 652.
Parlatoria mesuae, sp. n., on *Mesua ferrea* in Ceylon, III. 168.
Parlatoria pergandii (Chaff Scale), on *Araucaria bidwillii* in California, III. 420; infested with *Myriangium duriaei* in Florida, II. 129; in S. Africa, II. 300; on citrus in Montserrat, I. 329; imported into U.S.A., III. 117, 346, 420, 494, 558, 625, 690, 739.
Parlatoria pittospori, on *Pittosporum undulatum* in Australia, II. 652.
Parlatoria proteus, on *Pinus insignis* and citrus in Australia, II. 652.
Parlatoria pseudaspidiotus, intercepted on mango imported from Java, II. 460.
Parlatoria theae, intercepted in California, III. 558, 626.
Parlatoria viridis, on *Pittosporum* in Australia, II. 652.
Parlatoria zeylandica, sp. n., on bamboo in Ceylon, III. 755.
Parlatoria ziziphus, on orange in Algeria, II. 230; on *Zizyphus spinachristi* and citrus in Australia, II. 652, III. 167; on citrus in Br. Guiana, II. 417; intercepted on citrus, etc., in California, III. 494, 739; on citrus in Italy, I. 380, III. 143; on citrus in Spain, I. 278, 297; not an important pest of citrus in U.S.A., III. 144.
Parnara colaca, on rice in Ceylon, II. 644; on rice in S. India, II. 67.
Parnara conjuncta, on maize in Far East, II. 489.
Parnara guttata, on rice in Japan, I. 520.

Parnara mathias (Rice Skipper), on rice in Ceylon, II. **644**; on rice in India, II. **67, 487**; on rice and sugar-cane in Far East, II. **489, 490.**
Paropsis orphana, causing fire-blight of *Acacia* in Australia, III. **84.**
Parornix (*Ornix*) *anguliferella*, on apples in Russia, I. **536,** III. **220.**
Parornix (*Ornix*) *geminatella*, on apples in Missouri, I. **322.**
Parornix (*Ornix*) *prunivorella*, on apples in Missouri, I. **281.**
Parrots, damaging fruit in Trinidad, II. **575.**
Parsley, I. **68**; *Papilio polyxenes* on, in Canada, III. **551**; pests of, in France, I. **334, 335.**
Parsley Stalk Weevil (see *Listronotus latiusculus*).
Parsnip (*Pastinaca sativa*), *Rhopalosiphum dianthi* breeding on, in S. Africa, II. **48**; pests of, in the British Isles, I. **43,** II. **8**; pests of, in France, I. **504,** III. **188**; *Aphis rumicis* on, in Germany, II. **494**; *Depressaria heracleana* on, in Holland, III. **741**; slightly attacked by *Heterodera radicicola* in U.S.A., III. **178.**
Parthenothrips dracaenae, in U.S.A., III. **571.**
Partridge, destroying *Hylobius abietis* in Germany, II. **148.**
parummaculata, Conchyloctenia.
parumpunctata, Apomecyna.
parumpunctatus, Corizus (*Rhopalus*).
Parus ater, destroying insects pests, II. **147, 148, 222.**
Parus caudatus, destroying *Bupalus piniarius* in Germany, II. **147.**
Parus coeruleus, destroying insect pests, I. **306,** II. **147.**
Parus cristatus, destroying insect pests, I. **372,** II. **222.**
Parus major, destroying insect pests, II. **42, 147.**
Parus palustris, destroying *Bupalus piniarius* in Germany, II. **147.**
parvella, Encarsia.
parviclava, Caenacis.
parvicornis, Agromyza.
parvifasciatus, Cremnops.
parvula, Epitrix.
parvulus, Coptotermes; *Rhyncholophus*; *Sphenophorus*; *Urodus* (*Trichostibas*); *Xyleborus.*
parvus, Aphis; *Kuwanina*; *Lophococcus.*
Pasania densiflora, Myzocallis pasaniae on, in California, III. **687.**
pasaniae, Myzocallis.
Paspalum dilatatum, not attacked by *Toxoptera graminum* in South Africa, II. **153**; *Ancylolomia chrysographella* on, in S. India, II. **68.**
Paspalum membranaceum, Lissorhoptrus simplex on, in U.S.A., I. **151.**
Passalus cornutus, experiments with, III. **692.**
Passer domesticus (see Sparrow).
Passiflora edulis (see Granadilla).
Pasta Caffaro (see Caffaro Paste).
Pastinaca sativa (see Parsnip)
pastinacae, Lygus (*Capsus*); *Contarinia*; *Rhopalosiphum.*
Pastor roseus, destroying locusts in Russia and Siberia, II. **72, 509,** III. **537, 603.**
patagiata, Epeira.
patelliformis, Diaspis (see *Aula caspis pentagona*).
patens, Lachnosterna.
patruelis, Lachnosterna.
Paulownia imperialis, Aulacaspis pentagona on, I. **222.**
pauper, Penhammus.
pauxillus, Rhynchites.
Pavement Ant (see *Tetramorium caespitum*).
paykulli, Epilachna.
Pea Aphis (see *Acyrthosiphon pisi*).
Pea Bruchus (see *Bruchus pisorum*).
Pea Thrips (see *Kakothrips robustus*).
Pea Weevil (see *Bruchus pisorum*).
Peach (*Prunus persica*), Aphids on, in Africa, III. **749**; pests of, in S. Africa, I. **13, 196, 466,** II. **47, 573,** III. **167**; pests of, in Argentina, II. **207**; pests of, in Australia, I. **503,** II. **20, 493,** III. **80, 653**; *Papilio feisthameli* on, in Barbary, III. **427**; *Ceratitis capitata* on, in Bermuda, III. **171**; *Dacus zonatus* on, in Bengal, II. **558**; pests of, in Brazil, I. **28,** II. **174**; pests of, in Britain, II. **101, 563,** III. **659**; pests of, in Canada, and their control, I. **91, 93, 134, 180, 298, 324, 404, 418, 426,** II. **23, 431, 675,** III. **619**; pests of, in France, and their control, II. **390, 402, 501,** III. **694**; *Aphis persicae* on, in Germany, II. **500**; fruit-flies on, in Hawaii, I. **374,** III. **163**; *Phenacoccus aceris* on, in Holland, III. **744**; pests of, in Italy, III. **113, 124, 143, 431, 745**; *Ceratitis capitata* on, in Madagascar, III. **276**; *Anastrepha peruviana* on, in Peru, I. **516**; pests of, in Portugal, I. **313**; pests of, in Russia, I. **368, 460, 488,** II. **43, 73, 80, 419, 465, 515, 635, 636, 715,**

III. 35, 45, 46, 182, 225, 605; spinning mites on, in Sweden, III. 253; pests of, in U.S.A., and their control, I. 182, 243, 280, 282, 283, 381, 427, 472, 475, II. 120, 121, 135, 151, 216, 217, 244, 253, 300, 344, 347, 390, 438, 439, 458, 485, 529, 601, 663, 673, 704, 707, 708, III. 52, 140, 180, 192-194, 258, 259, 266, 301, 352, 417, 447, 462, 508, 512, 515, 545, 566, 571, 588, 625, 654, 673, 708, 709; pests imported into U.S.A., on, III. 117, 354, 420, 494, 558, 626; not injured by injections of potassium cyanide, III. 73.
Peach Aphis (see *Aphis amygdali*, *Aphis persicae*, *Rhopalosiphum dianthi*, and *Myzus persicae*).
Peach Borer, Eastern (see *Aegeria exitiosa*).
Peach Borer, Lesser (see *Aegeria pictipes*).
Peach Borer, Western (see *Aegeria opalescens*).
Peach Bud Mite (see *Tarsonemus waitei*).
Peach Lecanium (see *Eulecanium nigrofasciatum*).
Peach Scab, lime-sulphur concentrate against, III. 529.
Peach Scale (see *Eulecanium persicae*).
Peach Scale, West Indian (see *Aulacaspis pentagona*).
Peach-tree Bark-beetle (see *Phloeotribus liminaris*).
Peach-tree Borers (see *Aegeria pictipes* and *A. exitiosa*).
Peach Twig Borer (see *Anarsia lineatella*).
Peach Worm (see *Anarsia lineatella*).
Peach Yellows, legislation against, in S. Rhodesia, II. 163; legislation against, in Ontario, III. 71.
Pear (*Pyrus*), pests of, in S. Africa, I. 13, 196, II. 298, 299, III. 502; regulations regarding removal of, in S. Africa, II. 84; pests of in Australia, III. 25, 80, 158, 491, 503, 527; *Vanessa polychloros* on, in Barbary, III. 427; pests of, in Britain, I. 236, 433, III. 280, 346, 659, 715; pests of, in Canada, I. 90, 131, 404, II. 217, 432, 665, 676, III. 71, 407, 619, 678; pests of, in France, I. 167, 204, 481, II. 402, 448, 449, 478, 539, 623, III. 11, 694; pests of, in Germany, II. 485, 643, III. 250; pests of, in Holland, I. 386, III. 199, 201, 741; pests of, in Italy, III. 124, 143; *Galerucella lineola* on, in Norway, III. 108; pests of, in Portugal, I. 313; resistant to *Eriosoma* (*Schizoneura*) *lanigerum* in S. Rhodesia, II. 163; pests of, in Russia, I. 357, 361, 363, 364, 368, 437, 438, 439, 488, 493, 536, II. 35, 36, 43, 51, 79, 198, 330, 334, 342, 366, 370, 377, 419, 468, 523, 524, 714, 715, 718, III. 35, 43, 45, 46, 49, 50, 106, 130, 183, 204, 219, 223, 224, 310, 339, 438, 442, 533-535, 543, 544, 601, 603, 606, 610, 639; not attacked by *Lymantria dispar* in Russia, II. 275; pests of, in Spain, I. 315, 338; *Epitrimerus pyri* on, in Switzerland, I. 336; *Eriophyes pyri* on, in Tasmania, III. 362; *Cydia pomonella* on, in Uruguay, II. 162; pests of, in U.S.A., I. 100, 126, 140, 153, 154, 182, 280, 281, 325, 418, 425, 426, 427, 467, 472, II. 3, 14, 94, 113, 117, 132, 134, 135, 184, 247, 288, 294, 359, 380, 388, 390, 394, 435, 458, 484, 529, 530, 536, 555, 599, 658, 659, 707, III. 52, 115, 140, 149, 180, 194, 257, 258, 261, 268, 272, 275, 301, 348, 359, 415, 417, 461, 465, 493, 511, 515, 550, 566, 586, 588, 654, 668, 671, 687, 690, 708, 738; pests on, intercepted in U.S.A., III. 455; distribution of *Psylla hexastigma*, sp. n., on, II. 125; Tenthredinidae of, II. 505.
Pear, Avocado (see Avocado).
Pear Blight, legislation against, in Ontario, III. 71.
Pear Blister Mite (see *Eriophyes pyri*).
Pear Gall Mite (see *Eriophyes pyri*).
Pear Leaf-curling Midge (see *Perrisia pyri*).
Pear-leaf Rust-mite (see *Epitrimerus pyri*).
Pear Lecanium (see *Eulecanium pyri*).
Pear Midge (see *Contarinia pyrivora*).
Pear Psylla (see *Psylla pyri*).
Pear Scale, Italian (see *Epidiaspis piricola*).
Pear Slug (see *Eriocampoides limacina*).
Pear Sucker (see *Psylla pyricola*).
Pear Thrips (see *Taeniothrips pyri*).
Peas (*Pisum sativum*), *Prodenia litura* on, in Africa, III. 360; Aphids on, in Africa, III. 748,

749; pests of, in Austria, II. 429; pests of, in Barbados, III. 504, 626; pests of, in Britain, I. 434, III. 9, 159, 279; pests of, in Canada, I. 400, 412, III. 629; *Heterodera radicicola* on, in Ceylon, III. 123; pests of, in Denmark, III. 246, 698; food-plant of *Phlyctaenodes sticticalis* in Europe I. 40; pests of, in France, I. 102, 227, 411, II. 420, III. 694; pests of, in Germany, II. 494, 500, 501, III. 102; *Cneorrhinus geminatus* on, in Holland, III. 198; pests of, in Italy, III. 124; not attacked by *Oria musculosa* in Russia, II. 319; pests of, in Russia, I. 514, 539, II. 44, 340, 341, 370, 395, 425, 501, 502, 648, III. 50, 106, 172, 205, 337, 482, 542, 544, 635, 640, 702–704; *Schistocerca paranensis* on, in Trinidad, III. 679; pests of, in U.S.A., I. 225, 241, 243, II. 160, 536, III. 18, 153, 155, 270, 359, 450, 453, 459, 512, 530, 558, 762; not seriously attacked by *Phthorimaea operculella* in U.S.A., I. 102; not attacked by *Exomias pellucidus* in Britain, III. 288, 564; pests of stored, II. 117, 498; tests with insecticides on Aphids on, II. 189.

Pebrine, in Lepidopterous larvae, I. 287, 494, II. 105, 405.

Pecan (*Carya olivaeformis*), pests of, in Canada and U.S.A., I. 53, 524, II. 390, 543, III. 141, 306, 382, 472.

pecten, Spodoptera.

pectinatae, Chermes (*Aphrasthasia, Dreyfusia*).

pectinatus, Rhipiphorus.

pectinicornis, Cladius; *Corymbites*; *Ptilinus.*

pedalis, Pimpla (*Pimplidea*).

pedaria, Phigalia.

pedestris, Leucosomus; *Podisma* (*Pezotettix*); *Riptortus.*

Pedicularis palustris, on fallow land in Russia, II. 315.

pedicularius, Anthonomus.

Pediculoides graminum (see *Pediculopsis*).

Pediculoides ventricosus, not effective in destroying Argentine ants, I. 327; predaceous on *Sinoxylon sexdentatum*, II. 9, III. 10; bionomics of, in Europe and Egypt, II. 473, 502, 503, 505, 508, 596; destroying noxious insects, II. 405, 573, 577, III. 35, 566.

Pediculopsis (*Pediculoides*) *graminum*, on forage grass in Denmark, III. 247; on carnations in New Jersey, III. 566; on grain in Russia, II. 173, III. 183, 206.

Pedinus femoralis, on tobacco, maize, etc., in Russia, II. 172, III. 221, 226, 481.

Pediopsis, on willows in Maine, III. 530.

pedunculi, Pontania.

pegasalis, Dicymolomia.

Pegomyia betae, confined to Chenopodiaceae, II. 617.

Pegomyia bicolor, II. 617.

Pegomyia brassicae (see *Chortophila*)

Pegomyia ceparum (see *Hylemyia antiqua*).

Pegomyia cepetorum (see *Hylemyia antiqua*).

Pegomyia fusciceps (see *Chortophila*).

Pegomyia hyoscyami (Beet-Fly, Belladonna Leaf-miner) (*Anthomyia conformis*), on beet in France, II. 89, 450; in Germany, II. 500; on beet in Holland, I. 386; on beet in Russia, I. 487, III. 222, 232, 592, 608, 610; bionomics and control of, II. 467, 616, 617, III. 608.

Pegomyia nigritarsis, II. 617.

Pegomyia vicina (see *Chortophila*).

Pelargoderus, on cacao in Java, I. 4.

Pelargoderus bipunctatus, on cacao, etc., in Java, II. 535, III. 661.

Pelargonium, *Aulacaspis pentagona* on, I. 222.

Pelecocera, predaceous on *Psylla isitis* in India, I. 45.

Peleteiria robusta, parasite of *Cirphis* spp. in Texas, III. 684.

Peleteiria tessellata, parasite of *Euxoa segetum* in Russia, I. 540.

pellionella, Tinea.

pellucens, Oecanthus.

pellucida, Camnula.

pellucidus, Exomias (*Barypeithes*); *Ellipsidion.*

Pelopaeus cementarius, predaceous on *Laphygma frugiperda* in U.S.A., I. 518.

Pelopaeus pensilis, destroying *Thomisus citraeus* in Russia, II. 64.

Pelorotelopsella nigeriense, sp. n., parasite of *Stictococcus sjöstedti* in S. Nigeria, III. 433.

Peltophorum, not attacked by *Pseudococcus filamentosus* in E. Africa, II. 146.

Pempheres affinis (Cotton-Stem Weevil), on cotton in Madras, II. 139, III. 174.

Pemphigus, on beach in Italy, III. 54; in Hawaii, III. 492.

Pemphigus acerifolii, on maple in New Jersey, III. 192.

Pemphigus aceris, on maple in New Jersey, III. 192.

Pemphigus balsamiferae, on cotton in Colorado, III. 351.

Pemphigus betae, bionomics of, on sugar-beet, etc., in U.S.A., I. **468**, II. **251, 252, 536**, III. **335, 351, 465, 578.**
Pemphigus borealis, on *Populus* spp. in Germany, II. **124.**
Pemphigus burrowi, III. **55.**
Pemphigus bursarius, on willows in Maine, I. **467**; on *Populus* spp. in Germany, II. **124**; on poplar in Russia, III. **45, 220, 224.**
Pemphigus californicus, on ash in California, II. **251.**
Pemphigus canadensis, sp. n., on *Populus canadensis* in Argentina, III. **54.**
Pemphigus fraxini-dipetalae, on ash in California, II. **555.**
Pemphigus fraxinifolii, parasitised by *Leucopis flavicornis* in U.S.A., III. **90.**
Pemphigus globulosus, on *Populus* in Egypt, III. **749.**
Pemphigus gravicornis, on willows in Maine, I. **467.**
Pemphigus lactucarius, food-plants of, in Britain, I. **434**; on lettuce in France, I. **504.**
Pemphigus lichtensteini, on *Populus* spp. in Germany, II. **124.**
Pemphigus ovato-oblongus, on poplar in Russia, III. **45.**
Pemphigus pallidus, on elm in Russia, III. **223.**
Pemphigus piceae, food-plants of, in England, III. **633.**
Pemphigus populicaulis (see *Thecabius*).
Pemphigus populiconduplifolius (see *Thecabius*).
Pemphigus populimonilis, on willows in Maine, I. **467.**
Pemphigus populitransversus (Poplar Petiole Gall-louse), food-plants of, in Canada, III. **507.**
Pemphigus protospirae, on poplar in Russia, III. **45.**
Pemphigus pyriformis, on *Populus* spp. in Germany, II. **124**; on poplar in Russia, III. **45.**
Pemphigus xylostei, migration of, III. **608.**
Pemphredon (*Ceratophorus*) *tenax*, on roses in Ontario, II. **491.**
Penhammus pauper, on coffee in E. Africa, I. **414.**
Penicillium, causing foul brood in bees, II. **678.**
Penicillium anisopliae (see *Metarrhizium*).
peniculata, Ravinia.
pennaria, Himeria.
pennipes, Trichopoda.
Pennisetia (*Bembecia*) *hylaeiformis*, bionomics of, on raspberry in France, II. **621**; on raspberry in Russia, I. **36**, III. **223.**
Pennisetia (*Bembecia*) *marginata* (Raspberry Root Borer), declared a pest in Br. Columbia, I. **48**; controlled by birds in Oregon, I. **135**; on raspberries in Ontario, I. **405**, II. **492.**
Pennisetum spicatum (Small Millet), planted in place of sorghum against *Aphis sorghi*, II. **631.**
Pennsylvania, Chestnut-blight Commission in, II. **29**; miscellaneous pests in, I. **275, 295, 546**; II. **121**, III. **25, 113, 115, 132, 380, 588**; fruit pests and their parasites in, II. **190, 358, 601, 625**, III. **57, 131, 550**; *Tineopsis theobromae* bred from cacao beans in, I. **306**; useful insectivorous birds in, II. **708**, III. **420**; pests from, intercepted in quarantine, III. **657, 690.**
pennsylvanica, Epicauta.
pennsylvanicus, Camponotus; *Gryllus.*
pensilis, Pelopaeus.
Pentacme suavis, Hoplocerambyx spinicornis on, in India, III. **154.**
pentagona, Aulacaspis (*Diaspis*).
Pentaphis, on wheat in Crimea, I. **357.**
Pentaphis marginata, on grain in Russia, II. **171.**
Pentaphis setariae, on maize in Italy, III. **541**; on grain in Russia, II. **171.**
Pentaphis trivialis, on grain in Russia, II. **171**, III. **339, 601.**
Pentarthron (see *Trichogramma*).
Pentas rosae, Xylophanes tersa on, in Br. Guiana, I. **130.**
Pentatoma baccarum (see *Dolycoris*).
Pentatoma griseum, parasitised by *Phasia crassipennis* in Russia, I. **448.**
Pentatoma ligatum, on sorghum in Texas, III. **451.**
Pentatoma ornatum (see *Eurydema*).
Pentatoma triticum (see *Aelia cognata*).
Penthestes atricapillus, destroying insects in Ottawa, II. **307.**
Penthina pruniana (see *Olethreutes*).
Pentilia, preying on *Tetranychus telarius* (*bimaculatus*) in California, I. **240.**
Pentilia misella (see *Microweisia*).
Pentodon, in Russia, II. **198.**
Pentodon australe, on sugar-cane in Queensland, III. **491.**

Pentodon idiota, bionomics of, on beet, etc., in Russia, I. **357, 359, 531**, II. **43, 110, 171**, III. **41, 47, 222, 341, 402, 542, 544, 601.**
Pentodon monodon (see *P. idiota*).
Pentodon punctatum, on chicory in France, I. **256**; on vines in France, II. **362, 608.**
Peonies, *Hepialus lupulinus* on, in Holland, III. **198.**
Pepper, *Helopeltis bergrothi* on, in the Gold Coast, II. **671**, III. **662**; *Aulacaspis pentagona* on, in Porto Rico, III. **476.**
Pepper, Black (*Piper nigrum*), *Gynaikothrips karnyi* on, in Ceylon, II. **193**; *Pelargoderus bipunctatus* on, in Java, II. **535.**
Pepper Bush, not attacked by *Lymantria dispar* in U.S.A., III. **669.**
Pepper, Cayenne, *Ptinus tectus* in, III. **277.**
Pepper-corns, unidentified pest of, in Java, III. **313.**
Pepper Grass (see *Sophia ochroleuca*).
Pepper Tree (*Schinus molle*), *Anoplognathus analis* on, in Australia, III. **366.**
Pepper Tree Caterpillar (see *Bombycomorpha bifascia*).
Peppermint, I. **10.**
peraperta, Alloxysta.
perdita, Aphiochaeta.
perdix, Rhinaria.
peregrina, Schistocerca (*Acridium*).
peregrinator, Calosoma.
Peregrinus (*Delphax*) *maidis* (*Pundaluoya simplicia*), parasitised by *Anagrus flaveolus* in West Indies, I. **259**, II. **575**; on cucumber in Porto Rico, III. **476**; on cholam in India, II. **139**; on cacao in Nigeria, III. **166, 167.**
peregrinus, Zelus.
perezi, Leucaspis.
perforans, Sinoxylon; *Xyleborus.*
perforator, Paranagrus.
perforatus, Eucalymnatus.
pergandii, Parlatoria.
Pergesa (*Deilephila*) *elpenor* (Vine Hawk-moth), on vines in Astrachan, II. **627**, III. **221**; in France, II. **608**; on vines in Italy, III. **112.**
Pericallia matronula, on lettuce in France, I. **504.**
Pericallia (*Arctia*) *ricini*, on beans in Ceylon, II. **644.**
Perideraeus granellus, on bamboos in Brazil, III. **696.**
Peridroma (see *Lycophotia*).
Peridroma saucia (see *Lycophotia margaritosa*).
perieresalis, Diplopseutis.
Perilampidea syrphi, sp. n., parasite of Syrphids in Trinidad, II. **288.**
Perilampus, parasite of *Acaulona peruviana* in Peru, I. **172**; new species of, parasitising *Chrysopa* in S. Carolina, III. **25.**
Perilampus hyalinus, parasite of *Sarcophaga* in U.S.A., III. **82.**
Perilampus splendidus, parasite of *Athalia colibri* in Astrachan, III **638.**
Perilissus limitaris, parasite of *Pteronus ribesii* in France, II. **622.**
Perilitus americanus, parasite of Coccinellids in Virginia, II. **131, 132.**
Perilitus brevicollis, parasite of *Haltica* in France, I. **173**, II. **593.**
Perilitus epitricis, parasite of flea-beetles in U.S.A., III. **547.**
Perilloides bioculatus, predaceous on Colorado beetle in Canada, I. **405**, II. **665**; predaceous on *Scotogramma* (*Mamestra*) *trifolii* in U.S.A., I. **352.**
Perilloides circumcinctus, predaceous on beetles in Quebec, II. **665.**
Perilloides modestus, predaceous on *Hemileuca maia* in Quebec, II. **665.**
Perilloides serieventris, predaceous on *Malacosoma*, etc., in Quebec, II. **665.**
Perillus bioculatus (see *Perilloides*).
Perimeles remus, on sugar-cane in Mexico, I. **184.**
Perineura solitaria, on gooseberry in France, II. **622.**
Periodical Cicada (see *Tibicen septemdecim*).
Periplaneta americana (Common Cockroach), *Micrococcus* in, in U.S.A., II. **639.**
Periplaneta australasiae, on cotton in West Indies, III. **73.**
Periplaneta orientalis, *Coccobacillus* infections in, I. **336.**
Peripsocus, intercepted in U.S.A. on bay trees from Belgium, III. **117.**
periscelidactylus, Oxyptilus.
Perisporium, Chelinidea vittigera suspected of disseminating, I. **80.**
Perissopneumon (*Stigmacoccus*) *zimmermanni*, on rubber in E. Africa, II. **415, 416.**
Perissopterus javensis, hyperparasite of *Coccus hesperidum* in California, I. **309.**

Perissopterus pulchellus, parasite of *Aspidiotus perniciosus* in U.S.A., II. 385.
Peritelus griseus, on walnut, etc., in Russia, III. 206, 225.
Peritelus sphaeroides, on fruit trees in France, II. 449.
periusalis, *Pachyzancla*.
Perkinsiella saccharicida, introduced into Hawaii from Queensland, I. 103, III. 758; on sugar-cane imported from Hawaii into U.S.A, II. 461.
perla, *Chrysopa*.
perniciosa, *Myrmicomorpha*.
perniciosi, *Prospaltella*.
perniciosus, *Aspidiotus*.
Pernicious Scale (see *Aspidiotus perniciosus*).
Peronia ferrugana (Birch Leaf-roller), in Maine, I. 141.
Peronospora, control of, on vines, I. 223, 244, II. 25, 166, 239, 486, 537, 586.
perplexus, *Liodontomerus*.
perproximus, *Opius*.
perpulchra, *Haltichella*.
perrisi, *Loelius*.
Perrisia (*Cecidomyia*) *brassicae*, on rape in Bessarabia, I. 396; in Denmark, III. 247; on cabbage in Holland, I. 386.
Perrisia (*Dasyneura*) *bryoniae*, on vegetable marrow in France, I. 504.
Perrisia ignorata, on lucerne in Europe, I. 527.
Perrisia laricis, destroyed by bullfinches in France, I. 169.
Perrisia (*Dasyneura*) *leguminicola* (Clover Seed Midge), on clover in Britain, I. 242; on clover in Oregon, III. 266.
Perrisia lupulinae, on lucerne in Europe, I. 527.
Perrisia oenophila (see *Janetiella*).
Perrisia onobrychidis, on lucerne in Russia, II. 262.
Perrisia pyri, on fruit trees in England and France, I. 236, III. 495.
Perrisia (*Dasyneura*) *raphanistri*, on radishes, in France, I. 257.
Perrisia trifolii (Clover Leaf Midge), on *Trifolium repens* in England, I.242; on clover in Canada, I. 406, II. 664.
Perrisia vaccinii, on cranberries in Massachussetts, III. 532.
Perrisia viciae, on lentils, I. 123.
perscitus, *Geraeus*.
Persea, *Aspidiotus* on, in Fiji, III. 548.
Persea gratissima (see Avocado Pear).
perseae, *Paraleurodes*.
Persia, *Eurygaster integriceps* in, I. 446; *Pleurotropis illustris* from, III. 444.
Persian Powder, against vine pests, III. 477.
Persian Walnut (see *Juglans regia*).
persicae, *Aphis*; *Eulecanium* (*Coccus*, *Lecanium*); *Lachnus*; *Myzus*; *Rhopalosiphum*.
persicae-nigra, *Aphis*.
Persicaria, *Rhopalosiphum hippophaes* on, in Colorado, III. 351.
persicariae, *Polia* (*Mamestra*).
persicellum, *Cerostoma*.
persicorum, *Chyliza*.
persicum, *Pamphilius*.
Persimmon (*Diospyros kaki*), fruit-flies on, in S. Africa, I. 196; *Pulvinaria citricola*, sp. n., on, in Japan, III. 127; *Ceratitis capitata* on, in Java, III. 3; resistant to *Eriosoma lanigerum* in S. Rhodesia, II. 163; pests of, in U.S.A., I. 54, 161, III. 23, 654, 709; insect pests intercepted on, in U.S.A., III. 455, 558; not attacked by *Lymantria dispar* in U.S.A., III. 669; *Aspidiotus perniciosus* on, II. 390.
Persimmon, Wild, *Aleurodes citri* on in U.S.A., I. 186, III. 23.
personata, *Euxoa* (see *E. detersa*).
personatus, *Chrysomphalus*.
perspectalis, *Hymenia*.
perspicax, *Gitonides*.
perspicuus, *Microgaster*.
pertigera, *Apomecyna* (see *A. neglecta*).
pertinax, *Anobium*.
perturbatus, *Ips*.
Peru, Coccidae of, III. 135; fruit-flies in, I. 390, 517; parasites of *Saissetia oleae* in, II. 287; parasites of cotton-stainers in, I. 172; pests of cotton in, I. 157, 183, 316, III. 273; potato pests in, I. 546, II. 241, 280, 460.
peruana, *Sibinia*.
peruanus, *Bruchus* (*Mylabris*); *Xanthomelanodes*.
Peruvian Fruit-fly (see *Anastrepha peruviana*).
peruviana, *Acaulona*; *Anastrepha*; *Prospaltella*.
peruvianus, *Cerambycobius*.
pervastatrix, *Phylloxera*.
pestilens, *Doticus*.
petiolatus, *Neomegastigmus*.
petola, *Dreata*.
Petrochelidon lunifrons, destroying *Diabrotica duodecimpunctata* in U.S.A., I. 431.
Petrognatha gigas, on *Castilloa elastica* in Kamerun, II. 414.

Petrognatha gigas var. *spinosa*, on *Ficus elastica*, II. 414.
Petroleum Emulsion, formulae for, I. 29, 107, 239, 471, 338, II. 47, 97, 123, 147, 230, 445, 447, 478, 556, 612, III. 319, 417, 694; relative attractiveness of, to *Ceratitis capitata*, III. 28; and benzine, against locusts, III. 498; and benzine, against *Leptinotarsa decemlineata*, III. 712; and Bordeaux mixture, formula for, III. 257; (see Kerosene and Paraffin).
Petroleum Oils, properties of, III. 529.
Petunia, mosaic disease of tobacco in, I. 19; attacked by wood-lice in Ontario, II. 491.
Peucetia viridana, predaceous on *Monocrepidius vespertinus* in S. Carolina, III. 710.
pexops, Zenillia (*Myxexorista*).
Peziza calycina (see *Dasyscypha*).
Peziza willkommii (Larch Fungus), in Britain, I. 120.
Pezomachus botrana, parasite of vine moths in Russia, III. 211.
Pezomachus sericeus, hyperparasite of *Polychrosis botrana* in Tyrol, III. 497.
Pezoporus tenthredinarum, sp. n., parasite of cherry sawfly leaf-miner in U.S.A., III. 658.
Pezotettix pedestris (see *Podisma*).
Phacogenes, parasite of *Polychrosis botrana* in Tyrol, III. 497.
Phacosema zimmermanni, on mahogany in E. Africa, I. 415.
phaea, Cirphis.
Phaedon, on willows, etc., in France, I. 333.
Phaedon cochleariae (Mustard Beetle), bionomics and control of, in Sweden, III. 346.
Phaedon cochleariae var. *neglectus*, on Cruciferous plants in Russia, I. 537.
Phaedon incertum, on vegetables in Japan, I. 520.
phaedra, Satyrus (see *S. dryas*).
Phaenobremia cardui, predaceous on *Aphis cardui* in Lorraine, I. 295.
phaeodactyla, Marasmarcha.
phaeosoma, Syntomosphyrum.
Phaiogenes plutellae, parasite of *Plutella maculipennis* in Russia, III. 46.
Phaius, Pulvinaria floccifera on in Australia, III. 503.
Phalacropteryx praecellens, in Dalmatia, I. 238.
Phalaena anonella (see *Stenoma*).
phalaenarum, Telenomus.
Phalaenopsis, Acythopeus aterrimus on, in Singapore, I. 36.
Phalera bucephala, on forest trees in Portugal, I. 313; bionomics of, in Russia, I. 317, II. 44, III. 46, 112, 221, 544, 640, 641.
Phalera bucephaloides, in Russia, I. 317, III. 485.
phalerata, Drosophila.
Phalonia ambiguana (see *P. posterana*).
Phalonia (*Conchylis*) *badiana*, on Jerusalem artichoke, III. 33.
Phalonia (*Conchylis*) *epilinana*, on flax in France, III. 428.
Phalonia posterana, on Jerusalem artichoke, III. 33.
Phalonia rubigana (see *P. badiana*).
Phalonia rutilana (Juniper Webworm), on red cedar in Connecticut, I. 101.
Phaneroptera falcata, on vines in Italy, III. 113.
Phaneroptera nana, on cotton in Africa, II. 1.
Phaneroptera quadripunctata, destroying *Phylloxera* in Russia, III. 405.
Phanerotoma recurvariae, parasite of *Recurvaria nanella*, in U.S.A., III. 141.
Phanerotoma tibialis, parasite of *Mineola vaccinii* in U.S.A., III. 532.
Phanurus (*Ceraphron, Prophanurus*) *beneficiens*, parasite of *Diatraea striatalis* in Java, III. 62, 383, 384; unsuitable as a parasite of *Acrocercops cramerella*, III. 312; parasite of *Sesamia vuteria* (*nonagrioides*) in Mauritius, III. 160, 730, 756.
Phaonia (*Hyetodesia*) *trimaculata*, on cabbage in Britain, III. 460.
pharaonis, Monomorium.
phaseoli, Agromyza; Tullgrenia; Tychea.
Phaseolus, Agromyza phaseoli on, in Australia and Ceylon, II. 541; *Agromyza fabalis* on, in Rhodesia, I. 289; *Margarodes* spp. on, in India, I. 158.
Phaseolus adenanthus, Diaprepes abbreviatus spengleri on, in Porto Rico, III. 680.
Phaseolus lunatus (see Lima Bean).
Phaseolus mungo (Green Gram), pests of, in Dutch E. Indies, III. 248, 644, 645; *Pachytychius mungonis* on, in India, III. 444.
Phaseolus radiata, Prodenia litura on, I. 482.
Phaseolus vulgaris (French Bean), *Kakothrips robustus* on, in France, III. 279; *Aulacaspis pentagona* on, I. 221; probably not a food-plant of *Acyrthosiphon pisi* in Russia, III. 704.

Phasgonura (*Locusta*) *cantans*, on oats in France, III. 428.
Phasgonura (*Locusta*) *viridissima*, in Russia, III. 401.
Phasia crassipennis, hosts of, in Russia, I. 448, 451, III. 45.
Phasiane clathrata, on lucerne in Europe, I. 527.
Phassus malabaricus, on tea, etc., in India, III. 300, 723.
Phassus purpurascens, on *Cinchona succirubra* in Ceylon, III. 301.
Pheasants, destroying insects, I. 169, 387, III. 485.
Pheidole megacephala, associated with *Pseudococcus bromeliae* in Hawaii, I. 374; on stored food in St. Vincent, III. 412; destroying *Ceromasia sphenophori* in Fiji, III. 89; controlling *Scapteriscus didactylus* in Cuba, I. 324.
Phellodendron amurense, *Pulvinaria idesiae*, sp. n., on in Japan, III. 127.
Phenacaspis eugeniae, intercepted in Hawaii, III. 413.
Phenacoccus acericola (False Maple Scale), bionomics of, in U.S.A., I. 141, III. 474.
Phenacoccus (*Pseudococcus*) *aceris*, food-plants of, in Britain, I. 236, 237, II. 655, III. 346; on peaches in Holland, III. 744.
Phenaccoccus artemisiae, parasitised by *Scutellista cyanea* in California, I. 167.
Phenacoccus azalea, sp. n., on azalea in Japan, III. 127.
Phenacoccus dearnessi, on gooseberry in Maine, I. 141.
Phenacoccus eleabius, sp. n., on olive in Africa, III. 432.
Phenacoccus obtusus, on *Adansonia digitata* in E. Africa, II. 429.
Phenacra, parasite of *Isosoma noxiale* in Russia, II. 473.
Phenic Acid, and soap, formula for, III. 189.
phenice, *Zebronia*.
Phenophthalein, for testing Bordeaux mixture, II. 462, III. 495.
Phenyl, against *Ceylonica theaecola*, III. 489.
Phibalosoma (see *Hemarchus*).
Phidippus coloradensis, predaceous on *Scotogramma* (*mamestra*) *trifolii* in U.S.A., I. 352.
Phigalia pedaria (*pilosaria*), on Conifers, etc., in Britain, I. 119; II. 378, 563.
Philachyra apterum, bionomics of, on grain in Russia, II. 472, 473, III. 47.
Philachyra grande, II. 472.
Philadelphia, plague of *Cirphis unipuncta* in, III. 301; *Tortrix fumiferana* in, I. 201.
Philadelphus coronarius, *Aphis rumicis* hibernating on, in Russia, III. 542.
Philematium femorale, on illipe trees in Mauritius, III. 730.
Phileurus bajulus, on sugar-cane in Br. Guiana, I. 522.
Phileurus didymus, on sugar-cane in Br. Guiana, I. 130.
philippensis, *Sycoryctes*.
Philippia chrysophyllae, parasites of, on olive in Africa, III. 432, 433.
philippinensis, *Neanastatus*.
Philippines, pests of cacao in, I. 350, II. 192, III. 137; caprification of *Ficus nota* in, I. 341; new Chalcids from, III. 621, 633, 724; coconut pests in, I. 118, 136, 311, 314, II. 99, 134, 690, III. 739; fruit-flies in, I. 157, II. 116; new gall-midges from, III. 725; importation of Italian bees into, I. 379; locusts and their control in, I. 65–68, 470, III. 682; maize pests in, I. 154; mango pests in, I. 155, II. 540; parasites of mealy bugs in, II. 243, 244; *Metarrhizium anisopliae* imported into Ceylon from, III. 754; miscellaneous pests in, I. 148, 314, III. 247, 753; *Prodenia litura* on tobacco in, I. 481; *Tetranychus telarius* absent from, III. 13; work of Bureau of Science in, II. 489; pests from, imported into U.S.A., II. 461, III. 420, 455, 558.
Philisora catullus, parasites of, on sugar-cane in Br. Guiana, I. 521.
Philopedon plagiatus (see *Cneorrhinus*).
Philotermes pilosus, in colonies of *Leucotermes flavipes* in U.S.A., III. 379.
Philotrypesis ashmeadi, sp. n., in *Ficus nota* in the Philippines, I. 341.
Philotrypesis collaris, in *Ficus nota* in the Philippines, I. 341.
Philotrypesis longiventris, sp. n., from N. Queensland, III. 358.
Philotrypesis similis, sp. n., in *Ficus nota* in the Philippines, I. 341.
Phinotas Oil, unsatisfactory for fumigating soil against *Rhagoletis pomonella*, III. 59.
Phlegethontius (see *Protoparce*).
Phleum, *Aphis avenae* on, in U.S.A., II. 696.
Phleum pratense (seeTimothy Grass).
Phloeobius catenatus, on coffee in Uganda and East Africa, I. 107, 247, 414, III. 752.

Phloeobius pustulosus, on coffee in E. Africa, I. **414.**
phloeophaga, Ectoedemia.
Phloeops platypennis, on cotton in E. Africa, I. **349.**
Phloeosinus, on cedar in Canada, II. **25.**
Phloeosinus cribratus, on nutmegs in Penang, I. **351.**
Phloeothrips floridensis, sp. n., in Florida, I. **149.**
Phloeothrips oleae (Olive Thrips), on olive in Africa, III. **432**; parasitised by *Tetrastichus gentilei* in France, II. **488**; associated with *Phloeotribus scarabaeoides* in Italy, III. **705**; on olive in Palestine, II. **623.**
Phloeotribus, on olive in Italy, I. **391.**
Phloeotribus liminaris (Peach-tree Bark Beetle), on Conifers in Canada, II. **25.**
Phloeotribus oleae (see *P. scarabaeoides*).
Phloeotribus puncticollis, on rubber in Brazil, I. **351.**
Phloeotribus scarabaeoides, bionomics of, on olive in Italy, II. **699**, III. **99, 171, 705.**
Phlogophora meticulosa, on strawberries in Holland, I. **385.**
Phlugis mantispa, destroying froghoppers in Trinidad, II. **62.**
Phlyctaenia, parasitised by *Cremastus hymeniae* in Hawaii, III. **683.**
Phlyctaenia despecta, parasitised by *Chelonus blackburni* in Hawaii, III. **682.**
Phlyctaenia ommatias, parasitised by *Eupelmus dysombrias* in Hawaii, III. **681.**
Phlyctaenia rubigalis (see *Pionea*).
Phlyctaenodes nudalis, bionomics and control of, on beetroot in Russia, II. **248, 466, 467, 715.**
Phlyctaenodes palealis, on carrots in Russia, I. **499**, III. **403.**
Phlyctaenodes similalis, II. **248.**
Phlyctaenodes sticticalis (Sugar-Beet Webworm), bionomics and control of, in Russia, I. **357, 359, 360, 361, 362, 394, 459, 460, 484, 486, 492, 494, 495, 497, 527, 534, 535**, II. **34, 43, 44, 53, 63, 171, 198, 222, 248, 331, 356, 395, 442, 481, 521, 523, 718**, III. **41, 46, 51, 52, 67, 93, 94, 105, 111, 172, 205, 220, 225, 226, 232, 233, 242, 339, 397, 400, 402, 403, 404, 443, 542, 544, 601, 635, 641, 700**; on beet and lucerne in Canada and U.S.A., I. **40, 41, 42**, II. **537, 560, 623**, III. **70, 335**; on oats in France, III. **428.**
Phobetron pithecium, parasitised by *Apanteles phobetri*, sp. n., in U.S.A., III. **658.**
Phobetus comatus, bionomics of, on fruit trees in California, II. **663**, III. **625.**
Phoebe (see *Sayornis phoebe*).
phoenicis, Myelois; *Rhynchophorus.*
Phoenicococcus marlatti (Date Scale), in U.S.A., I. **180, 218, 518**, III. **84**; imported into U.S.A., from Hawaii on date palm, II. **461.**
phoenicopterus, Hippiscus.
Phoenix dactylifera (see Date Palm).
Phoenix sylvestris, pests of, in Straits Settlements, II. **99.**
Pholus achemon, on grapes in California, III. **16.**
Phoma oleracea, spores of, distributed by *Chortophila brassicae*, III. **200.**
Phomopsis citri, intercepted in California on citrus fruits, III. **420, 494, 558, 625.**
Phonapate porrecta, on mahogany in E. Africa, I. **414.**
Phonoctonus fasciatus, destroying cotton-stainers in E. Africa, II. **447, 580.**
Phora fasciata (see *Aphiochaeta*).
Phoracantha recurva, in S. Africa, III. **503.**
Phorbia, on raspberry in England, II. **563.**
Phorbia brassicae (see *Chortophila*).
Phorbia cepetorum (see *Hylemyia antiqua*).
Phorbia fusciceps (see *Chortophila*).
Phorbia rubivora (Raspberry Cane Maggot), in Oregon, I. **132.**
Phorichaeta, I. **114.**
Phorichaeta sequax (see *Wagneria*).
Phormium tenax (New Zealand Flax), *Pseudococcus calceolariae* imported on, into U.S.A., from New Zealand, III. **455**; pests of, in New Zealand, III. **302, 707**; *Fiorinia fioriniae* on, in Peru, III. **135.**
Phorocera, I. **114**; parasite of *Alabama argillacea* in Trinidad, II. **575**; parasite of *Vanessa antiopa*, III. **252.**
Phorocera claripennis, parasite of cutworms and other Lepidoptera in U.S.A., I. **352**, III. **153, 264, 369, 458, 552.**
Phorocera comstocki, parasite of *Melitara junctolineella* in U.S.A., I. **82.**
Phorocera doryphorae (see *Doryphorophaga*).
Phorocera leucaniae, parasite of *Hyphantria cunea* in Canada, I **402.**

Phorocera nefaria, parasite of *Venusia verriculata* and *Liothula omnivora* in New Zealand, III. 722.
Phorocera saundersi, parasite of *Lycophotia margaritosa* in U.S.A., III. 264.
Phorodon galeopsidis (see *Rhopalosiphum hippophaës*).
Phorodon humuli (Hop Aphis), declared a pest in Br. Columbia, I. 48; on damsons and hops in Britain, III. 9; on hops in France, II. 420; in Germany, II. 501; distribution of, in N. America, I. 241; bionomics of, in Russia, II. 79-82, III. 606; bionomics and control of, in U.S.A., III. 132, 269, 352, 423, 570, natural enemies of, in U.S.A., III. 132, 269, 570, 606.
Phosphoric Acid, against *Nosema apis*, III. 612
Phosphorus, effect of, as a manure on *Oscinella frit*, III. 148; in bait for *Scapteriscus didactylus*, III. 517; ineffective against *Lepisma saccharina*, III. 714.
Phosphorus virescens, on kola trees in Gold Coast, II. 672.
Photinia villosa, *Pulvinaria photiniae* sp. n., on, in Japan, III. 127.
photiniae, *Pulvinaria*.
Phoxopteris comptana (see *Ancylis*).
Phragmatiphila truncata, III. 409.
Phragmites communis (Reed Grass), Aphids on, III. 16, 45, 54, 351; spraying of, against *Locusta migratoria* in Russia, III. 388.
Phratora (see *Phyllodecta*).
Phricodus hystrix, distribution of, on *Sesamum indicum*, I. 526.
Phryganidia californica (California Oak Moth), bionomics of, in California, I. 417, II. 555, 599, III. 306.
Phryganodes (*Nacoleia*, *Omiodes*) *blackburni*, on coconuts in New Guinea and Sandwich Islands, III. 316; on coconut in Hawaii, III. 411; parasitised by *Chalcis obscurata* in Hawaii, III. 681.
phrygiana, *Linyphia*.
phrynocephalus, destroying locusts in Turkestan, II. 509.
Phrynosoma douglasi, destroying wireworms in U.S.A., III. 300.
Phrystola assimilis, on rubber in Africa, II. 415.
Phrystola coeca, on rubber in Africa, II. 415.
Phrystola hecphora, on rubber in Kamerun, II. 415.
Phryxe (*Exorista*) *vulgaris*, parasite of Lepidoptera in Europe and U.S.A., I. 202, II. 222, 357, III. 369.
Phthia picta, on tomato and *Solanum nigrum* in Porto Rico, III. 476.
Phtheochroa rugosana, on vegetable marrow in France, I. 504.
Phthorimaea (*Lita*), on tobacco in Sumatra, III. 202.
Phthorimaea heliopa, on tobacco in B. E. Africa, II. 570; on tobacco in Nyasaland, I. 273, II. 277; on tobacco in S. Rhodesia, I. 287, 288.
Phthorimaea ocellatella (Beet Moth), on beetroot in France, II. 89, 450.
Phthorimaea operculella (*Lita solanella*), (Potato Tuber Moth, Tobacco Split Worm), bionomics of, in Australia, I. 377, II. 118, 119, 584, III. 527; legislation against, in Canada, II. 273, III. 32; on tobacco in the Dutch E. Indies, III. 248, 744; bionomics and control of, in France, I. 103, 166, 227, II. 400, 401, 402, 420; parasites of, in Hawaii, II. 629; intercepted on potato in Hawaii, III. 657; bionomics of, in India, III. 144, 323; on potatoes in Portugal, I. 314; on potato in Peru, I. 546; on tobacco and potatoes in S. Rhodesia, I. 288; on tobacco in Transvaal, I. 302; bionomics and control of, in U.S.A., I. 102, 428, 509, II. 117, 280, 302, 344, III. 179, 328, 418, 531, 691; legislation against, in U.S.A, II. 344, III. 624, 657; distribution of, I. 102, II. 280, 401.
Phthorimaea solanella (see *P. operculella*).
phthorimaeae, *Omorgus*.
Phyciodes ismeria (see *Charidryas gorgone*).
Phycis convolutella (see *Zophodia*).
Phycis indiginella (see *Mineola*).
Phycus testaceus, parasite of *Lepidosaphes ulmi* in Britain, III. 675.
Phygadeuon, parasite of *Cydia pomonella* in Russia, I. 366; parasite of vine moths in France, I. 524.
Phygadeuon eudeminis, parasite of vine moths in Russia, III. 211.
Phygadeuon fumator, parasite of *Chortophila brassicae* in Britain, III. 617, 627.
Phygadeuon (*Dirophanes*) *plesius*, parasite of *Tortrix fumiferana* in Maine, I. 202.
Phygadeuon rusticellae, parasite of *Tineola biselliella* in Britain, III. 256.

Phygadeuon varicornis, parasite of vine moths in Russia, III. 211.
Phylax (*Dendarus*) *punctatus*, destroyed by rooks in Russia, III. 342.
Phyllanthus distichus, *Melanchroia corvaria* on, in Porto Rico, III. 517.
Phyllanthus emblica, *Oxyrhachis tarandus* on, in India, II. 242.
Phyllaphis fagi (Beech Aphis), on beech in Canada, III. 552; on beech in England, III. 660.
Phyllaphis querci, on *Quercus agrifolia* in California, II. 251.
Phyllaphis quercifoliae, sp. n., on scrub oak in Colorado, II. 635.
Phyllereus juglandis, on walnut in Russia, III. 206.
Phyllirea decora, *Aulacaspis pentagona* on, I. 222.
Phyllirea vilmoriana, *Aulacaspis pentagona* on, I. 222.
Phyllobius, on cotton in the Bismark Archipelago, I. 349; on apple and pear in England, III. 659; on fruit in France, II. 449.
Phyllobius argentatus, on larch in Britain, III. 676; on fruit trees in Germany, II. 499.
Phyllobius betulae, on fruit trees in France, II. 449.
Phyllobius calcaratus, on raspberries etc., in Holland, I. 385.
Phyllobius contemptus, in Russia, III. 393.
Phyllobius maculicornis, on larch, etc., in Britain, I. 388, 433, III. 676.
Phyllobius oblongus, in Baden, II. 499; on apple in Britain, I. 388, 433, II. 8, 563; on fruit trees in France, II. 449; in Russia, III. 393.
Phyllobius pyri, on fruit trees in France, II. 449; in Germany, II. 499; in Russia, II. 370.
Phyllobius viridiaereus, on apple in Ireland, II. 8.
Phyllocnistis citrella (Citrus Leaf-miner), parasites of, in Ceylon, II. 651; on citrus in India and Ceylon, I. 278, 279, II. 651, III. 157; intercepted in California on citrus from Philippines, II. 455.
Phyllocoptes, on black currant in Britain, III. 303.
Phyllocoptes schlectendali, on apple in Br. Columbia, II. 676.
Phyllocoptes vitis, bionomics of, in Europe, I. 468, 469; on vines in France, I. 249; on vines in Germany, II. 499.
Phyllodecta (*Phratora*), on willows etc., in France, I. 333.
Phyllodecta (*Phratora*) *vitellinae*, control of, on willows in England, I. 433, III. 660; on willows in Holland, I. 385, III. 742; on black poplar in Russia, III. 601.
Phyllodecta vulgatissima, on willows in England, III. 660; on willows in Holland, III. 742; on black poplar in Russia, III. 601.
Phyllodromia germanica, control of, in Natal, II. 653.
Phyllognathus silenus, on vines in Italy, III. 112.
Phyllonorycter (see *Phyllorycter*).
Phyllopertha horticola, on rye in Denmark, III. 245, 698; on fruit in England, I. 236; on grasses in Ireland, II. 8; measures against, in Norway, III. 107; bionomics and control of, in Russia, II. 110, 672, 720, III. 50, 228, 393.
Phyllopsis fraxini, on ash in Norway, III. 697.
phyllopus, *Leptoglossus*.
Phyllorycter (*Lithocolletis*) *crataegella* on apple in Oregon, III. 260.
Phyllorycter insignitella, on lucerne in Europe, I. 527.
Phyllorycter nigrescentella, on lucerne in Europe, I. 527.
Phyllorycter platani, on plane in Italy, III. 124.
Phyllorycter (*Lithocolletis*) *populifoliella*, bionomics of, on poplar and willow in Russia, I. 495, II. 443, 718, III. 105, 220, 402, 443.
Phylloscelis atra (Cranberry Toad Bug), bionomics of, in U.S.A., II. 455–457.
Phyllosticta prunicola, measures against, in Russia, II. 291.
Phyllotreta, on hops in Austria, I. 342; bionomics of, in Russia, II. 37, 198, 340, 355, 356, 357, 370, 372, 648.
Phyllotreta affinis, on potato in Ireland, III. 460.
Phyllotreta armoraciae, in Canada, I. 400, II. 664; on cabbage in Russia, I. 210, III. 47.
Phyllotreta aterrima, in Russia, I. 210.
Phyllotreta atra, in Denmark, III. 247, 698; control of, on mustard and cabbage in Russia, I. 536, II. 614, III. 204, 212, 218, 340, 390, 393, 399, 637.
Phyllotreta consobrina (Blue Flea-Beetle), measures against, on turnips in England, III. 96.
Phyllotreta cruciferae, on cabbage and mustard in Russia, I. 210, III. 47, 212, 340, 393, 399, 606, 637.

Phyllotreta diademata, on mustard in Astrachan, III. 637.
Phyllotreta flexuosa, in market-gardens in Russia, III. 393.
Phyllotreta (*Haltica*) *nemorum* (Turnip Flea-Beetle), in Denmark, III. 247, 698; on radishes in France, I. 257; on cabbage in Ireland, II. 655; on Cruciferous plants in Russia, I. 210, 211, 212, 395, 492, II. 43, III. 204, 212, 340, 390, 393, 399, 481, 606.
Phyllotreta nigripes, in Russia, III. 393.
Phyllotreta pusilla, on radishes in U.S.A., I. 177, III. 687.
Phyllotreta ramosa, on Cruciferous and Solanaceous plants in California, III. 85.
Phyllotreta schreineri, on mustard in Astrachan, III. 439, 637.
Phyllotreta sinuata (Wavy-striped Flea-Beetle), parasitised by *Pleurotropis* sp. in Canada, III. 565; on Cruciferous plants in Quebec, II. 664, III. 68, 149, 565; on Cruciferous plants in Russia, I. 210, III. 481.
Phyllotreta turcmenica, III. 439.
Phyllotreta undulata, on turnips in England, III. 96; on Cruciferous plants in Russia, I. 210, III. 47, 212, 218, 393, 399.
Phyllotreta vittata (Turnip Flea-Beetle), on vegetables in Canada, I. 299, 400, II. 664, III. 68, 149; in Russia, I. 492; on radishes in U.S.A., III. 687.
Phyllotreta (*Haltica*) *vittula*, on barley in Denmark, III. 698; bionomics of, in Russia and Siberia, I. 214, 487, II. 172, 198, 266, 370, III. 47, 393, 481.
Phylloxera, II. 64, 196, III. 278; in S. Africa, II. 298, 653, III. 502; in Algeria, II. 323; not present in Astrachan, II. 496, 627; control of, in Australia, III. 732; dangers of importation of, into Australia, II. 584; in Bavaria, II. 633; in Far East, II. 489; in France, I. 228, II. 91, 156, 157, 363; in Germany, I. 274, 392, II. 517, 518; not present in Greece, I. 409; in Hungary, I. 428; bionomics and control of, in Italy, I. 382, II. 684, III. 124, 386, 495, 763-767; in Luxemburg, II. 586; legislation against, in Luxemburg, I. 542; in Portugal, I. 100; legislation against, in Russia, II. 167, 496, 627, III. 405; in Russia, II. 167, 168, 364, III. 405, 477, 478, 538, 602, 701; in Switzerland, II. 127, 605; in U.S.A., II. 281, III. 382; natural enemies of, I. 316, II. 91; measures against, I. 428, 544, 545, II. 255, 256, 293, 363, 517, 518, 595, III. 395, 405; varieties of vines susceptible to, II. 157; (see also under *P. vastatrix*).
Phylloxera acanthochermes, on oak in Germany, II. 124.
Phylloxera caryae-avellana, on hickory in New Jersey, III. 191.
Phylloxera caryae-caulis, on hickory in New Jersey, III. 191.
Phylloxera caryae-phallax, on hickory in New Jersey, III. 191.
Phylloxera coccinea, on oak in Germany, II. 667.
Phylloxera corticalis, in S. Africa, III. 503.
Phylloxera pervastatrix, on vines in Lorraine, II. 157, III. 766.
Phylloxera popularia, food-plants of, in California, III. 686.
Phylloxera pyri, on *Pyrus* in Russia, II. 79.
Phylloxera quercus, bionomics of, in Germany, II. 667; on oak in Norway, III. 697.
Phylloxera salicola, on *Salix lasiolepis* in California, III. 686.
Phylloxera vastatrix (Vine Louse), bionomics of, I. 18, 19, III. 763-767; history of importation of, into Australia, II. 205; in Bessarabia, II. 43, III. 226; in England, II. 237; in France, II. 609; in Germany, II. 499; in Japan, I. 520; in Italy, II. 13, 418, III. 113, 709, 763-767; in U.S.A., I. 180, III. 191.
Phylloxera vitifoliae, older name for *P. vastatrix*, I. 18, III. 763.
phylloxerae, *Rhizoglyphus*.
Phymateus superbus, on coffee in B. E. Africa, II. 570.
Phymateus viridipes, on cotton in Africa, II. 1.
Physalis, mosaic disease of tobacco in, I. 19; *Helopeltis* on, in Gold Coast, II. 671.
Physalis angulata var. *linkiana*, *Estigmene acraea* on, in Arizona, III. 513.
Physalis peruviana, *Phthorimaea operculella* on, II. 280.
Physalodes physalodes, *Phthorimaea operculella* on, II. 280.
Physapus pisivora (see *Kakothrips robustus*).
Physapus robustus (see *Kakothrips*).
Physcus fijiensis, parasite of *Aspidiotus* in Fiji, II. 495.

Physcus seminotus, sp. n., parasite of *Chionaspis* in Eritrea, III. 433.
Physcus stanfordi, parasite of *Leucaspis kelloggi* in California, II. 495.
Physcus varicornis, parasite of *Aspidiotus perniciosus* in U.S.A., III. 417.
Physic Nut (see *Jatropha curcas*).
physocarpi, *Megastigmus*.
Physocarpus opulifolius, *Megastigmus physocarpi* on, in N. America, I. 297.
Physokermes coryli (see *Eulecanium*).
Physokermes piceae (Spruce Bug Scale), on spruce in U.S.A., III. 474.
Physopus robustus (see *Kakothrips*).
Physothrips atratus, on beans and peas in England, III. 279, 488; on tobacco in Russia, II. 267.
Physothrips funtumiae, on *Funtumia* in S. Nigeria, II. 108.
Phytalus smithi, on sugar-cane in Barbados, I. 93, 252, 253, 263, II. 82, 532; on sugar cane in Mauritius, I. 28, II. 32, 612, III. 731, 756.
Phytelephas macrocarpa (Ivory Plant), *Coccotrypes eggersi* on, in Ecuador, I. 351.
Phytobacter lycopersicum, causing disease in tomatoes, III. 540.
Phytocoris magnicornis, III. 345.
Phytodecta fornicata, on lucerne in Europe, I. 527.
Phytodietus, parasite of *Polychrosis viteana* in U.S.A., I. 113.
Phytodietus vulgaris, parasite of *Eucosma ocellana* in U.S.A., III. 584.
Phytoecia ephippium, on parsnips in France, I. 504.
Phytometra (*Plusia*), food-plants of, in Dutch E. Indies, III. 644; parasitised by *Trichogramma semblidis* in Russia, III. 613; in Saskatchewan, III. 70; on tobacco in Sumatra, III. 202.
Phytometra argentifera, on potatoes in Australia, II. 118.
Phytometra (*Autographa*) *brassicae*, on cabbage in U.S.A., II. 361, III. 472; parasitised by *Pimpla conquisitor* in U.S.A., I. 178.
Phytometra californica (Alfalfa Looper), bionomics of, on lucerne, etc., in U.S.A., II. 115, 245, 708, III. 71, 269, 270, 334, 406, 457, 753.
Phytometra chalcites, on tobacco in Far East, II. 490; bionomics of, on tobacco, in Hawaii, II. 630, III. 363, 681, 682; bionomics of, in New Zealand, III. 721; on cotton in Nyasaland, I. 272, II. 277; experiments with *Chaetogaedia monticola* and, III. 711.
Phytometra chrysitis, on Jerusalem artichoke, III. 33.
Phytometra circumflexa, on cotton in Africa, II. 1.
Phytometra confusa, on cotton in Africa, II. 1; on asparagus in Russia, II. 468.
Phytometra (*Plusia*) *gamma*, on lettuce and flax in France, I. 504, III. 428; on grain and beet in Russia, I. 395, 490, 499, 527, II. 34, 258, 355-356, III. 46, 50, 104, 221, 393, 403, 637, 639, 641; parasites of, I. 16, III. 542; infested with *Empusa plusiae*, II. 376; on Jerusalem artichoke, III. 33.
Phytometra gutta (see *P. confusa*).
Phytometra iota, on Jerusalem artichoke, III. 33.
Phytometra (*Plusia*) *orichalcea* (Burnished Brass Moth), on cotton in Nyasaland, II. 277; in Rhodesia, III. 361.
Phytometra (*Plusia*) *signata*, on tobacco in Far East, II. 490.
Phytometra verticillata (Potato Looper Moth), on potatoes in Victoria, II. 118.
Phytomyptera nitidiventris, parasitised by *Dibrachys affinis*, II. 588; parasite of *Polychrosis botrana* in Russia and Tyrol, III. 211, 497.
Phytomyza, on marguerites and chrysanthemums in England, III. 660.
Phytomyza affinis, on lucerne in Europe, I. 527; on chrysanthemums in Sweden, III. 250; confused with *P. chrysanthemi*, III. 114.
Phytomyza albiceps, parasitised by *Chrysocharis* in New Zealand, III. 722; on peas in Russia, III. 544.
Phytomyza aquifolii, intercepted in California on holly from Holland, III. 150.
Phytomyza aquilegiae, on *Aquilegia* in U.S.A., III. 709.
Phytomyza arctii (see *P. nigra*).
Phytomyza (*Napomyza*) *chrysanthemi* (Marguerite Fly), in Scotland, I. 387; and its control, in Canada and U.S.A., I. 55, II. 677, III. 113.
Phytomyza flavicornis, on cabbage in England, III. 660.
Phytomyza geniculata, on chrysanthemums in Europe, II. 130, 424, 425, III. 250, 747; on cucumbers and beans in Russia, III. 544, 610.
Phytomyza lateralis, confused with *P. chrysanthemi*, III. 114.

Phytomyza nigra, on Jerusalem artichoke, III. 33.
Phytomyza nigricornis, confused with *P. chrysanthemi*, III. 114.
Phytomyza orobanchiae, feeding on *Orobanchia* spp., III. 172, 222.
Phytomyza pisi (see *P. albiceps*).
Phytonomus, in Russia, I. 214, II. 370; (see *Hypera*).
Phytonomus posticus (see *Hypera variabilis*).
Phytophthora, pasta caffaro against, III. 347; spraying against, on potato and tomato, III. 522.
Phytoptus (see *Eriophyes*).
Phytoscaphus dissimilis, sp. n., on tea in Assam, III. 444.
Picea, *Chermes* spp. on, I. 387, III. 9; (see Fir and Spruce).
Picea alaskiana, *Aphis abietina* on, in Britain, II. 618.
Picea alba (White Spruce), *Aphis abietina* on, in Britain, II. 618; bark-beetles on, in Canada, III. 43; *Aphis abietina* on, in Holland, III. 743; *Paratetranychus ununguis* on, in Sweden, III. 253, 435.
Picea alcoguiana, *Aphis abietina* on, in Britain, II. 618.
Picea bracteata, *Megastigmus pinus* on, in N. America, I. 297.
Picea engelmannii (Engelmann's Spruce), *Aphis abietina* on, in Britain, II. 618; pests of, in Canada and U.S.A., II. 386, III. 2, 350, 407; *Paratetranychus ununguis* on, in Sweden, III. 253, 435.
Picea excelsa (Fir), *Chermes* spp. on, I. 386, II. 14, III. 344, 597; Aphids on, in Britain, II. 618, III. 633; *Chermes pini* on, in Holland, I. 386; little attacked by *Aphis abietina* in Holland, III. 743; pests of, in Russia, II. 220, 516, III. 608; *Paratetranychus ununguis* on, in Sweden, III. 253, 435; not an alternate host of *Chermes nusslini*, II. 14.
Picea gigantea, *Aphis abietina* on, in Britain, II. 618.
Picea glehire, *Aphis abietina* on, in Britain, II. 618.
Picea hondoensis, *Aphis abietina* on, in Britain, II. 618.
Picea kosteriana, *Aphis abietina* on, in Britain, II. 618.
Picea menziesi, *Aphis abietina* on, in Holland, III. 743.
Picea monstrosa, *Aphis abietina* on, in Britain, II. 618.
Picea morinda, *Aphis abietina* on, in Britain, II. 618.
Picea nigra (Black Spruce), *Aphis abietina* on, in Britain, II. 618; *Polyphylla fullo* on, in Hungary, II. 309; pests of, in Canada, III. 43.
Picea omorica, *Aphis abietina* on, in Britain, II. 618.
Picea orientalis (Caucasian Fir), *Chermes* spp. on, in Europe, I. 386, II. 14, III. 344, 597.
Picea parryana (Colorado Blue Spruce), pests of, in Colorado, III. 350, 407,
Picea pectinata (see *Abies*).
Picea polita, *Aphis abietina* on, in Britain, II. 618.
Picea pungens, *Aphis abietina* on, in Britain, II. 618; pests of, in Holland, III. 201, 743.
Picea remonti, *Tetranychus* on, in Holland, III. 201.
Picea rubra, *Aphis abietina* on, in Britain, II. 618.
Picea sitchensis (Sitka Spruce), Aphids on, in Britain, II. 618, III. 633; pests of, in Br. Columbia, III. 3; *Megastigmus piceae* on, in Colorado, III. 407; *Paratetranychus ununguis* on, in Sweden, III. 253, 435.
picea, *Formica*.
piceaperda, *Dendroctonus*.
piceae, *Chermes*; *Cryphalus*; *Megastigmus*; *Pemphigus*; *Physokermes*.
piceaella, *Recurvaria*.
piceaefoliana, *Epinotia*.
piceana, *Tortrix* (*Cacoecia*).
piceus, *Attagenus*.
picina, *Baris*; *Psylliodes*.
picipes, *Otiorrhynchus* (see *O. singularis*); *Rhabdopterus*; *Stethorus*.
Pickle Worm (see *Diaphania nitidalis*).
Picramnia pentandra, timber of, attacked by *Apate francisca* in Porto Rico, III. 517.
Picroena excelsa (Bitter Wood), extract of, against Aphids, III. 187, 651; extract of, not effective against Aphids, II. 720; in Jamaica, III. 651.
picta, *Bagrada*; *Ceramica* (*Mamestra*); *Phthia*; *Stylopidea*.
pictalis, *Pyralis*.
picticollis, *Adoretus*.
picticornis, *Solindemia*; *Stenopogon*; *Taeniopoda*.
pictipennis, *Tomaspis*.
pictipes, *Aegeria* (*Synanthedon*); *Derostenus*.
pictus, *Porcellio*.
Picus viridis, destroying insects in Germany, II. 148.
piercei, *Habrocytus*.

pieridis, Aphis.
Pieris, on cabbage in France, I. 227, II. 420; measures against, II. 560, 561; natural enemies of, II. 6, 136, 215, 585, 711.
Pieris brassicae, not observed on mustard in Astrachan, III. 637; and its parasites in Britain, III. 277, 715; on cabbage in Denmark, III. 610, 699; in France, I. 257, II. 611; on Cruciferae in India, II. 487, III. 145; control of, in Italy, III. 12, 124; sowing hemp and tomatoes to protect crops from, I. 68, 191, III. 340, on cabbages in Portugal, I. 313; bionomics and control of, in Russia, I. 395, 460, 499, II. 43, 341, 480, 515, 523, 614, 715, III. 46, 50, 51, 104, 109, 139, 204, 218, 311, 340, 390, 393, 399, 403, 543, 544, 601, 641, 701; natural enemies of, II. 215, 424, 487, 588, III. 46, 277, 543; measures against, II. 210, III. 12, 109, 139, 390, 440, 701.
Pieris daplidice, on radishes in France, I. 257; bionomics of, in Russia, I. 537, II. 355, 356, 357, III. 399, 400, 637.
Pieris (*Pontia*) *monuste*, on cabbage in Br. Guiana, I. 130; food-plants of, in Porto Rico, I. 389, III. 477.
Pieris napi, on radishes and turnips in France, I. 257, 504; in market gardens in Russia, I. 395, 527, III. 204, 544.
Pieris protodice, on vegetables in Canada and U.S.A., I. 100, 177, 412, III. 472.
Pieris (*Pontia*) *rapae*, in Canada and U.S.A., II. 4, 476, 664, 665, 677, III. 16, 70, 335, 472, 507, 552; on radishes in France, I. 257; on Crucifers in Hawaii, III. 363; in Italy, III. 12; in Russia, I. 497, 499, 537, II. 43, 341, 355, 442, III. 46, 50, 109, 204, 340, 393, 399, 403, 613, 637; on horse-radishes in Sweden, III. 347; parasites of, II. 663, III. 46, 613.
Piesma capitata, on *Reseda* in Russia, III. 543.
Piezodorus lituratus, on lucerne in Russia, III. 45.
Piezostethus cursitans, predaceous on bark-beetle larvae in Sweden, III. 147.
Piezotrachelus (see *Apion*).
Pigeon, destroying *Tortrix murinana* II. 148.
Pigeon Grass, *Aphis maidiradicis* on, in Illinois, I. 124.
Pigeon Pea (*Cajanus indicus*), *Gracilaria* on, in Br. Guiana, I. 343; pests of, in Nigeria, III. 166; *Hemichionaspis minor* on, in Peru, III. 357; *Prodenia litura* on, in Philippines, I. 482; pests of, in West Indies, I. 165, 323, 389, II. 87, 144, 532; *Stictococcus dimorphus* on, in Uganda, III. 288; pests of, in Zanzibar, III. 125.
pigeoti, Ichneumon.
piger, Cleonus.
Pigs, destroying insects, I. 67, II. 27, 484, 696, III. 196, 264, 271, 472; danger of using, against *Melolontha*, II. 640.
Pig-weed (see *Amaranthus paniculatus*).
pilicollis, Omophlus.
pilipennis, Thryptocera.
piliventris, Archytas.
pilleriana, Sparganothis (*Oenophthira*).
pilosa, Anoxia; *Pterocomma*; *Tingis* (*Tropidochila*).
pilosaria, Phigalia (see *P. pedaria*).
pilosella, Cantharis (*Lytta*).
pilosipes, Eurytrachelus.
pilosus, Henicopus; *Limonius*; *Paratetranychus* (*Tetranychus*); *Philotermes.*
pimalis, Blapstinus.
Pimelopus, on palms in New Guinea, II. 99.
Pimelopus pygmaeus, on coconut in South Sea Islands, II. 2.
Pimelopus preussi, on coconut in South Sea Islands, II. 2.
Pimelopus robustus, on coconut in South Sea Islands, II. 2.
Pimelopus tenuistriatus, on coconut in South Sea Islands, II. 2.
pimpinellae, Schizomyia.
Pimpla, parasite of Lepidoptera, I. 368, 524, III. 241, 310, 393, 474, 655.
Pimpla alboricta, III. 584.
Pimpla alternans, parasite of vine moths in Europe, III. 211, 497.
Pimpla arctica, parasite of *Tortrix viridana* in England, II. 620.
Pimpla brassicariae, experiments with, in Russia, II. 214.
Pimpla capulifera, experiments with in Russia, II. 214.
Pimpla (*Itoplectis*) *conquisitor*, parasite of Lepidoptera in U.S.A., I. 113, 178, 202, 226, II. 183, III. 584.
Pimpla detrita, parasite of *Polychrosis botrana* in Tyrol, III. 497.
Pimpla examinator, parasite of Lepidoptera in Europe, I. 270, 347, II. 214, 622, III. 481, 497.

Pimpla hawaiiensis, parasite of Lepidoptera in Hawaii, III. 682; in bait-traps for *Ceratitis capitata*, III. 568.
Pimpla heliophila, parasite of *Cydia pomonella* in Russia, I. 363.
Pimpla inquisitor, parasite of *Orgyia antiqua*, III. 268.
Pimpla instigator, parasite of Lepidoptera in Europe, I. 270, 481, II. 6, 214, 622, III. 105, 196, 224, 403.
Pimpla (*Itoplectis*) *maculator*, parasite of *Hypera variabilis* in France, II. 577; parasite of *Hypera murina* in Russia, II. 109; parasitised by *Catolaccus alter* in Russia, II. 109; parasite of *Polychrosis botrana* in Tyrol, III. 497.
Pimpla (*Itoplectis*) *marginatus*, parasite of *Cydia pomonella* and *Euzophera semifuneralis* in U.S.A., III. 476, 655.
Pimpla ontario, parasite of *Tortrix fumiferana* in Maine, I. 202.
Pimpla (*Pimplidea*) *pedalis*, parasite of Lepidoptera in Canada and U.S.A., I. 226, III. 369.
Pimpla pudibundae, parasite of *Dasychira pudibunda* in Holland, III. 196.
Pimpla pomorum, parasite of *Anthonomus pomorum* in Russia, III. 535.
Pimpla roborator, parasite of cotton boll-worm in Egypt, II. 320, 596.
Pimpla sagax, parasite of *Cydia pomonella* in Russia, I. 365.
Pimpla stercorator, parasite of *Hyponomeuta malinellus* in Russia, I. 347.
Pimpla strigipleuris, parasite of vine moths in Europe, III. 211, 497.
Pimpla turionellae, parasite of vine moths in Europe, III. 211, 497.
Pimplidea pedalis (see *Pimpla*).
Pin Cherry (*Prunus pennsylvanica*), *Malacosoma disstria* on, in U.S.A., III. 87.
Pinaris (*Depressaria*) *propinquella*, on Jerusalem artichoke, III. 33.
pinastri, *Hylobius*; *Lophoderium*.
Pine, pests of, in Britain, I. 119, 120, II. 497, III. 633, 715; *Panolis flammea* (*piniperda*) on, in Bohemia, I. 394; insect pests on, intercepted in California, III. 494; pests of, in Canada, I. 407, II. 24, 25, III. 2, 19; *Protolachnus tuberculostemmata* on, in Egypt, III. 749; pests of, in France, I. 423, II. 422, 657; pests of, in Germany, I. 371, 373, II. 325, 486; pests of, in Holland, III. 196; pests of, in Italy, III. 124; *Orgyia antiqua* on, in Norway, III. 696; *Thaumetopoea pityocampa* on, in Portugal, I. 313; pests of, in Russia, I. 395, 448, 486, 493, 494, 539, II. 10, 220, 331, 334, 341, 483, 516, 523, III. 41, 48, 50, 66, 106, 217, 342, 389, 391, 402, 443, 594-597, 728, 729; pests of, in Sweden, II. 242, III. 255, 435; pests of, in U.S.A., I. 35, 160, II. 115, 294, 361, 543, 649, III. 16, 248, 357, 376, 588, 668, 671, 673, 734, 738; quarantine measures against importation of, in U.S.A., III. 665; *Chermes* spp. on, I. 387, II. 14, III. 41, 594-597; not attacked by *Lymantria dispar*, II. 711, III. 43; (see *Pinus* spp.).
Pine, Austrian (see *Pinus austriaca*).
Pine, Black (see *Pinus austriaca*).
Pine, Bull (see *Pinus ponderosa*).
Pine, Corsican (see *Pinus laricio*).
Pine, Lodge Pole, *Vespamima sequoia* on, in Montana, II. 645; *Dendroctonus* killing, in Colorado, III. 308.
Pine, Norfolk Island (see *Araucaria excelsa*).
Pine, Scots (see *Pinus sylvestris*).
Pine, Scrub (see *Pinus rigida*).
Pine, Umbrella (see *Sciadopitys*).
Pine, Weymouth (see *Pinus strobus*).
Pine, White (see *Pinus strobus*).
Pine, Yellow (see *Pinus ponderosa*).
Pine-bark Aphis (see *Chermes piniicorticis*).
Pine Beetle (see *Hylurgus piniperda*).
Pine-leaf Scale (see *Chionaspis pinifoliae*).
Pine Moth (see *Panolis flammea*).
Pine Resin, as an adhesive, II. 374.
Pine Sawfly (see *Lophyrus pini*).
Pine-shoot Moth (see *Rhyacionia buoliana*).
Pine Weevil (see *Hylobius abietis* and *Pissodes notatus*).
Pine White Butterfly (see *Neophasia menapia*).
Pineapple (*Ananassa sativa*), *Pseudococcus citri* on, in E. Africa, II. 429; pests of, in Australia, II. 152, III. 80; insect pests intercepted on, in California, III. 420, 494, 558, 625, 690, 739; *Ceratitis capitata* on, in Java, III. 3; destroyed by locusts in Malay States, II. 111; *Rhabdocnemis obscurus* on, in San Francisco, I. 426; *Pseudococcus* (*Aspidiotus*) *bromeliae* on, in

Seychelles, II. 269; *Ceratitis capitata* bred from, in Uganda, II. 59; pests of, in West Indies, I. 389, III. 412.
Pineapple Fungus (*Thielaviopsis*), use of carbolineum emulsion against, III. 319.
Pineapple Mealy Bug (see *Pseudococcus bromeliae*).
pinetella, Dioryctria.
Pineus (see *Chermes*).
pinguinalis, Aglossa.
pinguis, Anomala; *Lepidiota.*
pini, Aphanus; *Chermes* (*Pineus*); *Cryptothrips*; *Dendrolimus*(*Gastropacha, Malacosoma*); *Eriophyes*; *Lophyrus*; *Oecanthus*; *Poliaspis*; *Rhizobius.*
piniariella, Ocnerostoma.
piniarius, Bupalus.
pinicola, Lachnus; *Olene.*
pinicolana, Steganoptycha (see *Enarmonia diniana*).
pinicorticis, Chermes.
pinifoliae, Chermes; *Chionaspis.*
pinifoliella, Paralechia.
piniodes, Chermes.
piniperda, Hylurgus (*Myelophilus*); *Panolis* (see *P. flammea*).
Pinipestis erythropasa, sp. n., on pines in U.S.A., II. 649.
Pink Cotton Boll worm (see *Gelechia gossypiella*).
Pink Borer (see *Sesamia vuteria*).
Pink Mealy Bug (see *Pseudococcus sacchari*).
pinnaeformis, Lepidosaphes.
Pinnaspis nitidus (see *Lepidosaphes pyriformis*).
pinnulifera, Chrysomphalus dictyospermi.
Pinus (see Pine).
Pinus attenuata, Paratimia conicola, sp. n. on, in U.S.A., III. 546.
Pinus austriaca (Austrian or Black Pine) *Dendroctonus monticolae* on, in Br. Columbia, II. 25; *Pityogenes bidentatus* on, in France, I. 423; *Polyphylla fullo* on, in Hungary, II. 309; *Lophyrus pini* on, in U.S.A. III. 573.
Pinus banksiana, Paralechia pinifoliella on, in Canada, I. 407.
Pinus canariensis, Leucaspis perezi on, in the Canary Islands, III. 345.
Pinus cembra (Siberian Cedar), *Chermes sibiricus* on, in Holland, III. 201; *Dendrolimus* spp. on, in Russia, II. 220; *Chermes sibiricus* on, III. 597.
Pinus contorta, Rhyacionia (*Evetria*) *mortana* on, in U.S.A., III. 248.
Pinus densiflora, Lophyrus pini on, in U.S.A., III. 573.
Pinus divaricata, Rhyacionia (*Evetria*) *albicapitana* sp. n. on, in U.S.A., III. 248.
Pinus echinata (Short-leaf Pine), pests of, in U.S.A., III. 725.
Pinus flexilis, Lophyrus pini on, in U.S.A., III. 573.
Pinus halepensis, Leucaspis perezi on, in Canary Islands, III. 345.
Pinus insignis, Parlatoria proteus on, in Australia, II. 652.
Pinus khasya, Lasiocampid on, in India, III. 723.
Pinus lambertiana (Sugar Pine), *Conophthorus* on, in U.S.A., III. 667, 668.
Pinus laricio (Corsican Pine), *Polyphylla fullo* on, in Hungary, II. 309; not attacked by *Odontria puncticollis* in New Zealand, I. 194.
Pinus longifolia (Chir Pine), *Ips longifolia* on, in India, III. 723, 729, 730.
Pinus maritima, Thaumetopoea pityocampa on, in Portugal, I. 313.
Pinus monticola, pests of, in Br. Columbia, II. 25, III. 2.
Pinus murrayana, Dendroctonus spp. on, in Canada, III. 3; *Recurvaria milleri* on, in U.S.A., III. 248.
Pinus palustris, resistant to attacks of termites, III. 379.
Pinus pithyasa, pests of, in Russia, III. 599.
Pinus ponderosa (Bull Pine, Yellow Pine), pests of, in Canada and U.S.A., I. 51, 87, 297, 407, II. 25, 245, 251, 553, 645, III. 2, 18, 248, 658, 667.
Pinus radiata, pests of, in U.S.A., II. 115, III. 357.
Pinus rigida, pests of, in U.S.A., I. 321, III. 588.
Pinus scopulorum, Conophthorus on, in U.S.A., III. 667.
Pinus strobus (White Pine, Weymouth Pine), *Aphis abietina* on, in Britain, II. 618; *Hylobius abietis* on, in Germany, II. 501; pests of, in U.S.A., II. 710, III. 87, 474, 515, 573, 598, 667.
Pinus sylvestris (Scots Pine), pests of, in Britain, I. 333, II. 498, 618, 661, III. 675, 677; *Bupalus piniarius* on, in Germany, II. 235; *Polyphylla fullo* on, in Hungary, II. 309; pests of, in Russia, II. 516, III. 701; pests of, in U.S.A., II. 701, III. 354.
Pinus taeda, Psyllids on, in Washington, III. 567.
Pinus virginiana, pests of, in U.S.A. III. 248, 567, 588.
pinus, Megastigmus.

Piocoris erythrocephalus, on hay in Russia, III. 479.
Pionea forficalis, on cabbage, etc., in Russia, I. 537, 538; on horse-radish in Sweden, III. 347.
Pionea rubigalis, in Canada, III. 551.
Piophila casei (Cheese Skipper), in U.S.A., II. 572.
Piper, Aspidiotus on, in Fiji, III. 548.
Piper nigrum (Black Pepper), *Thosea cervina* on, in Ceylon, II. 654; *Pelargoderus bipunctatus* on, in Java, II. 535; scale-insects on, III. 725.
Piper subpeltatum, Aspidiotus destructor on, in E. Africa, II. 429.
Pipiza pisticoides, parasite of *Thecabius populicaulis* in California, III. 686.
Pipunculus industrius, parasite of *Eutettix tenella* in U.S.A., III. 463, 557.
Pipunculus vagabundus, parasite of *Eutettix tenella* in U.S.A., III. 463, 557.
piri (see *pyri*).
piricola, Epidiaspis (*Aulacaspis*).
Pirus (see *Pyrus*).
pisi, Acyrthosiphon (*Aphis, Macrosiphum, Nectarophora, Siphonophora*); *Apion*; *Bruchus* (see *B. pisorum*); *Contarinia* (*Cecidomyia*); *Laria* (see *Bruchus pisorum*); *Phytomyza* (see *P. albiceps*); *Polia* (*Mamestra*).
pisicola, Thielavia.
pisivora, Physapus, Thrips (see *Kakothrips robustus*).
pisorum, Bruchus (*Laria*).
Pissodes, on Conifers in Canada, I. 407, III. 43.
Pissodes notatus, on forest trees in Britain, I. 464; in Germany, II. 326; on pines in Russia, I. 498, II. 523, III. 50, 66, 402.
Pissodes pini, in Russia, III. 50.
Pissodes strobi (White Pine Weevil), on pines in Canada and U.S.A., I. 53, II. 361, III. 84, 371, 474, 515, 585, 673.
Pissodes validirostris, on fir-cones in Sweden, II. 242.
Pistacio vera (Pistachio Nut), *Diaspis gennadii* imported on, from Italy, II. 461.
pisticoides, Pipiza.
pistillata, Scudderia.
Pistol Case-bearer (see *Coleophora malivorella*).
pistor, Monochamus.
Pisum sativum (see Pea).
Pitangus sulphuratus, destroying insects in Br. Guiana, I. 521, III. 652.
pithecium, Phobetron.
Pithecolobium, Calotermes balloui on, in St. Vincent, II. 284.
Pithecolobium dulce, not attacked by *Pseudococcus filamentosus* in E. Africa, II. 146.
Pithecolobium moniliferum, Aspidiotus fodiens on, in Australia, III. 167.
Pithecolobium saman (Saman Tree), pests of, in West Indies, I. 425, III. 73; *Pseudococcus filamentosus* on, in E. Africa, II. 146.
Pitteleina, against Coccids, II. 695; against *Eriosoma* (*Schizoneura*) *lanigerum*, I. 230.
pittospori, Parlatoria.
Pittosporum, Parlatoria viridis on, in Australia, II. 652; *Saissetia oleae* intercepted on, in California, III. 739; *Icerya purchasi* on, in France, I. 172; *Pinnaspis nitidus* on, in New Zealand, III. 721.
Pittosporum undulatum, Parlatoria pittospori on, in Australia, II. 652.
pityocampa, Thaumetopoea.
Pityogenes, on Conifers in Canada, I. 407.
Pityogenes (*Ips*) *bidentatus*, on pines in France, I. 423, II. 422; food-plants of, in Scotland, III. 715; *Coenopachys hartigii* in burrows of, in Britain, III. 675.
Pityogenes (*Tomicus*) *bistridentatus*, in forests in Russia, III. 217.
Pityogenes (*Tomicus*) *chalcographus*, in forests in Russia, III. 217; on spruce in Sweden, III. 768.
Pityogenes quadridens, III. 217; on pines in France, I. 423.
Pityophthorus, on Conifers in Canada, I. 407, II. 25.
piurae, Eurytoma; *Spermophagus.*
placens, Theridium.
Plaesius javanus, predaceous on *Cosmopolites sordidus* in Java, II. 507.
plaga, Earias.
Plagia, in Canada, I. 114.
Plagia americana, parasite of *Phytometra californica* in U.S.A., III. 270.
plagiata, Tiracola.
plagiaticollis, Castolus.
plagiatus, Cneorrhinus (*Philopedon*).
Plagiodera, on willows, etc., in France, I. 333.
Plagiodera circumcincta, on cotton in S. Nigeria, II. 106.
Plagiognathus albipennis, on hay in Russia, III. 480.
Plagiognathus arbustorum, on wheat and vetches in Russia, III. 479.
Plagiognathus chrysanthemi, on hay and lucerne in Russia, III. 479.

Plagiognathus politus, immature stages of, in U.S.A., III. 725; disseminating fire-blight in U.S.A., II. 288.
Plagiolepis custodiens, associated with *Toxoptera graminum* in S. Africa, II. 153.
Plagiolepis longipes, bionomics of, in Java, III. 316, 317, 647, 663.
Plagionotus arcuatus, on oaks in Astrachan, III. 221.
Plagionotus (*Clytus*) *floralis*, on lucerne in Russia, II. 262.
Plagionotus speciosus, on shade trees in Quebec, III. 585.
plana, *Aradis*.
Plane (*Platanus*), pests of, in France, II. 195, 402; pests of, in Italy, III. 124; *Lymantria dispar* on, in Spain, II. 165; (see *Platanus*).
Planestichus migratorius, destroying insects in U.S.A., I. 226, 431, II. 307, III. 377.
planicollis, *Neso*.
plankii, *Coquillettina*.
Plant Pest Legislation, necessity for, in British E. Africa, II. 558; in E. Africa and Uganda, I. 349, II. 273, 570, III. 32, 410; in S. Africa, II. 83, 86, 300, 654, III. 502; in Algeria, II. 594, III. 101; in Australia, I. 136, II. 83, 117, III. 582; in the Bahamas, III. 492; in Canada, I. 47, 84, II. 20, 33, 94, 207, 273, III. 9, 32, 71; in Ceylon, III. 65; in Eritrea, III. 113; in France, II. 397; suggested in France, II. 398; in Germany, I. 274, II. 518; in Gold Coast, II. 278; in Br. Guiana, III. 175; in India, II. 273, III. 345; in Italy, I. 379, III. 160; in Japan, I. 520; in Java, III. 3; in Malay States, II. 7, 391, 422, 479; in Mauritius, I. 399, 400; in S. Rhodesia, II. 163; in Russia, II. 76, 167, 496, 627, III. 405; in Switzerland, I. 224; in Tasmania, I. 359; proposed against *Eriosoma lanigerum* in Turkestan, III. 539; in U.S.A., I. 85, 234, 269, 428, II. 91, 185, 187, 250, 251, 294, 344, 385, 394, 418, 460, 716, III. 43, 121, 274, 330, 335, 364, 421, 424, 513, 516, 555, 624, 657, 665; in West Indies, II. 531, III. 72, 367, 555; in Zanzibar, I. 235.
Plantago, *Oidium* on, II. 150; *Euxoa segetum* on, in Russia, II. 212, 312; not attacked by *Bothynoderes punctiventris* in Russia, II. 178.
Plantago lanceolata, *Crambus caliginosellus* on, in Europe, II. 524.
Plantain, pests of, in Ceylon, II. 644, 654; butterfly pest of, in Malay States, I. 158; pests of, in Br. Guiana, II. 417, III. 175; grasshoppers on, in Ohio, I. 453; *Ligyrus ebenus* on, in West Indies, I. 253; (see Banana).
Plasmodiophora, control of, on cabbage in Russia, III. 218.
Plasmopora viticola (Vine Mildew), on vines in France and Russia, III. 395, 522, 544.
platani, *Callipterus*; *Phyllorycter* (*Lithocolletis*).
Platanthera bifolia (False Orchis), *Aphis hederae* on, in Germany, III. 607.
Platanus, not attacked by *Aspidiotus perniciosus*, I. 472; (see Plane).
platensis, *Oeceticus*.
platura, *Chortophila* (*Anthomyia*).
Platycerus quercus on pear in U.S.A., III. 182.
Platycheirus albimanus, parasitised by *Homocidus* spp. in Britain, I. 149.
Platygaster herricki, parasite of *Mayetiola destructor* in U.S.A., I. 528, II. 225, III. 416.
platyhypenae, *Euplectrus*.
Platylabus ambiguus, in France, III. 97.
Platylabus cothurnatus, parasite of *Bupalus piniarius* in Russia, III. 49.
Platymetopius acutus, disseminating fire-blight in U.S.A., II. 288.
Platynus, on sugar-beet in California, II. 303.
Platyomus lividigaster, in bait-traps for *Ceratitis capitata*, III. 568; introduced into Hawaii, III. 757.
Platyparea poeciloptera (Asparagus Fly), II. 593; in market-gardens in Russia, III. 393; in U.S.A., I. 295; bionomics and distribution of, II. 403–404.
Platypedia putnami, on apple in Br. Columbia, II. 675.
platypennis, *Phloeops*.
Platyptilia pusillidactyla, introduced to destroy lantana in Hawaii, III. 757.
Platyptilia rhododactyla, on roses in Russia, II. 714.
Platypus, on Conifers in Br. Columbia, III. 3.
Platypus biformis, on pines in India, III. 729.
Platypus curtus, on *Shorea robusta* in India, III. 723.

Platypus solidus, on *Hevea* in Ceylon I. 89; on *Shorea robusta* in India, III. 723.
Platysma cupreus (see *Pterostichus*).
plebeius, Dictyotus; *Scymnus*.
plecta, Agrotis.
Plectana stellata, predaceous on *Gargaphia solani* in U.S.A., III. 576.
Plectrodera scalator (Cottonwood Borer), Sarcophagid parasites of, in U.S.A., III. 452, 495.
Plectroscelis breviuscula (see *Chaetocnema*).
Plectroscelis vittula (see *Phyllotreta*).
plenicornis, Capsus.
Plesiocoris rugicollis, bionomics of, in England, II. 659; on fruit trees in Norway, III. 107.
plesiotypus, Aenoplex.
plesius, Phygadeuon.
pleurostigma, Ceuthorrhynchus.
Pleurotropis, parasite of *Phyllotreta sinuata* in Canada, III. 565; parasite of *Agromyza scutellata* in U.S.A., III. 133; parasite of *Mayetiola destructor* in U.S.A., I. 528.
Pleurotropis africana, sp. n., parasite of Hemipteron in Nyasaland, III. 444.
Pleurotropis amaurocoela, sp. n., parasite of *Sylepta derogata* in Nyasaland, III. 444.
Pleurotropis clinognathus, sp. n., parasite of *Synagris cornuta* in W. Africa, III. 444.
Pleurotropis homoea, sp. n., parasite of *Busseola fusca* in Nyasaland, III. 444.
Pleurotropis illustris, sp. n., from S.W. Persia, III. 444.
Pleurotropis mediopunctata, sp. n., parasite of Coccinellid in S. Nigeria, III. 444.
Pleurotropis neavei, sp. n., parasite of *Charaxes* in Nyasaland, III. 443; parasite of *Apanteles* in E. Africa, III. 443.
Pleurotropis nigripes, sp. n., parasite of Braconid in Nigeria, III. 444.
Pleurotropis rugosithorax, parasite of *Agromyza* in U.S.A., II. 46.
Pleurotropis telenomi, hyperparasite of *Anaphe* in Uganda, II. 548.
Pleurotropis testaceipes, sp. n., in S. Carolina, II. 307.
Pleurotropis violacea, sp. n., parasite of *Heteronygmia leucogyna* in Nyasaland, III. 444.
plexippus, Anosia.
plicator, Eriophyes.
Plocaederus ruficornis, in the Philippines, I. 155.
Plodia (*Ephestia*) *interpunctella* (Indian Meal Moth), I. 114, 118; not infesting army biscuits, I. 293; infesting biscuits, I. 330; in wheat and dried figs in Portugal, I. 313; parasitised by *Habrobracon hebetor* in Hawaii, III. 682; in dried fruits in Russia, III. 221; in stored ground-nuts in Senegal, II. 549; in flour and stored cereals in Canada and U.S.A., II. 93, 382, III. 175, 262, 575.
plorabunda, Chrysopa.
plotnikovi, Habrobracon.
Plovers, destroying insects, I. 68, 306, II. 504, 576, III. 380, 551, 746.
Plowrightia morbosa (Black Knot), legislation against, in Canada, I. 48, III. 71.
Pluchea odorata, Coccus hesperidum on, in Barbados, II. 533.
Plum (*Prunus*), fruit-flies on, in S. Africa, I. 196; *Aulacaspis pentagona* on, in Argentina, II. 163; pests of, in Australia, II. 119, III. 80, 492, 503, 653; pests of, in Britain, I. 245, 388, 433, II. 8, 563, 655, III. 74, 659, 676, pests of, in Canada, I. 85, 87, 403–404, 405, 425, 426, 427, II. 23, 217, 431, 432, 665, 676, III. 68, 72, 137, 358, 551, 552, 619; *Pomphopoea aenea* on, in N. Carolina, I. 243; *Bryobia* on, in Egypt, II. 505; pests of, in France, I. 71, 472, II. 195-196, 421; pests of, in Germany, I. 340, II. 486, 500; pests of, in Italy, III. 143, 431; *Cydia pomonella* on, in Portugal, I. 313, 314; resistant to *Eriosoma lanigerum* in S. Rhodesia, III. 163; attacked by termites in S. Rhodesia, I. 466; pests of, in Russia, I. 368, 440, 460, 489, 497, 522, 536, II. 36, 42-43, 51, 80-81, 291, 311, 318, 337, 348, 366, 368, 370, 419, 468, 496, 523, 524, 638, 640, 651, 692, 712, 714-715, III. 44, 45, 46, 50, 105, 106, 183, 214, 220, 224-226, 310, 339, 393, 397, 401, 402, 438, 442, 533-535, 543, 601, 606, 609, 610, 639; pests of, in Seychelles, I. 129; *Paratetranychus pilosus* on, in Sweden, III. 253; pests of, in Tasmania, III. 410; pests of, in U.S.A., I. 40, 131, 134, 154, 241, 280-284, 381, 385, 426, 474-475, II. 14, 94, 120, 135, 244, 294, 300, 390, 436, 439, 458, 464, 485, 529, 536, 599, 674, 710, III. 52, 77,

140, 180, 192, 258, 272, 301, 335, 351, 352, 414, 415, 423, 493, 508, 625, 631, 654, 668, 671, 687.
Plum Aphis (see *Aphis pruni*).
Plum, Chinese (see *Noronhia emarginata*).
Plum Curculio (see *Conotrachelus nenuphar*).
Plum Fruit Sawfly (see *Hoplocampa fulvicornis*).
Plum Gall-mite (see *Eriophyes padi*).
Plum, Jamaica Damson (see *Chrysophyllum oliviforme*).
Plum, Java, *Ceratitis capitata* on, in Hawaii, II. 578.
Plum-leaf Sawfly (see *Priophorus padi*).
Plum, Natal (see *Carissa arduina*).
Plum Sphinx (see *Hyloicus drupiferarum*).
Plum-tree Aphis (see *Aphis prunifolii*).
Plumeria, not attacked by *Pseudococcus filamentosus* in E. Africa, II. 146; *Coccus viridis* on, in Ceylon, II. 191.
Plumeria acuminata (Frangipane), *Chrysomphalus aonidum* on, in Seychelles, II. 566.
plumeriae, Cryphalus.
Plusia (see *Phytometra*).
Plusia falcifera (see *Syngrapha*).
plusiae, Empusa; *Siphona.*
Plutella, on cabbage in S. Rhodesia, II. 236.
Plutella armoracia, on horse-radish in Colorado, I. 177.
Plutella cruciferarum (see *P. maculipennis*).
Plutella maculipennis (Diamond-back Moth), in E. Africa, I. 246, 415, II. 283; bionomics and control of, on turnips, etc., in Britain, III. 256, 550, 715, 745; bionomics of, in Canada and U.S.A., I. 177, II. 5, III. 68, 70, 551; on turnips in Denmark, III. 247, 698; on lettuce in France, I. 504; bionomics of, in Hawaii, III. 363, 682; on cabbage in Norway, III. 107; on cabbage in Porto Rico, III. 477, 517; bionomics of, on Cruciferae in Russia, I. 395, 460, 537, II. 355, 356, 515, 614, III. 46, 67, 104, 109, 204, 220, 340, 390, 399, 443, 481, 637, 641; on horse-radish in Sweden, III. 347.
plutellae, Angitia; *Phaiogenes.*
pluvialis, Malacosoma.
Poa, Aphis avenae on, in U.S.A., II. 696.
Poa bulbosa var. *vivipara, Talis quercella* on, in Astrachan, III. 478.
Poa cerotine, Otiorrhynchus ovatus on, in Br. Columbia, I. 93.
Poa pratensis, Otiorrhynchus ovatus on, in Br. Columbia, I. 93; *Oscinella frit* on, in Russia, II. 371; *Prosopothrips cognatus* on, in U.S.A., III. 578.
Pochazia fuscata, on coffee in Java, III. 314.
Podabrus pruinosus, predaceous on Aphids in U.S.A., I. 511, II. 32.
podalirius, Papilio.
podana, Tortrix (*Cacoecia*).
podi, Aphis.
Podisma (*Pezotettix*) *pedestris*, bionomics of, in Russia and Siberia, II. 474, III. 482, 537, 637.
Podisus maculiventris, predaceous on *Gargaphia solani* in U.S.A., III. 576.
Podisus modestus, predaceous on Colorado potato beetle in U.S.A., II. 665.
Podisus serieventris, predaceous on Colorado potato beetle in U.S.A., II. 665.
Podisus spinosus (Spined Soldier Bug), predaceous on *Phylloscelis atra* in U.S.A., II. 456.
Podogaster evetrivorus, sp. n., parasite of *Rhyacionia* (*Evetria*) in New Mexico, III. 18.
Podonta daghestanica, on mustard, etc., in Russia, III. 94, 638.
Podonta elongata, III. 94.
Podonta flecki, in Russia, III. 94.
Podonta morio, in Russia and Greece, III. 94.
Podonta (*Cistela*) *nigrita*, bionomics and distribution of, in Russia, III. 94, 483, 542, 601.
Podonta (*Cistela*) *oblonga* (see *P. nigrita*).
Podosesia syringae, on shade trees in Quebec, III. 584; on lilac in Russia, III. 43; on lilac in U.S.A., III. 515.
Podothrips semiflavus, on *Panicum barbinode* in Porto Rico, I. 343.
Poecile baicalensis, destroying *Dendrolimus segregatus* in Russia, II. 223.
Poecillis judicanda, on *Bambusa birmanica* in India, III. 723.
Poecilocapsus lineatus (Four-lined Leaf Bug), bionomics of, in U.S.A., I. 276, III. 373, 551, 553.
Poecilochroma pomedaxana, sp. n., on apple and oak in Britain, III. 277.
Poecilocoris, damaging tea seed, II. 430.
Poeciloptera candida (see *Lawana*).
poeciloptera, Platyparea.

Poeciloscytus basalis, spreading *Bacillus amylovorus* in U.S.A., III. 465.
Poeciloscytus cognatus, on mustard, etc., in Russia, II. 355, 467, III. 45, 220, 479.
Poecilosoma candidatum, on roses in Scotland, III. 715.
Poecilus, predaceous on *Otiorrhynchus ligustici* in Russia, II. 669.
Poecilus cupreus, predaceous on *Bothynoderes punctiventris* in Russia, II. 179.
Poecilus koyi, *Coccobacillus* infections in, I. 336.
Poecilus punctatus, predaceous on *Bothynoderes punctiventris* in Russia, II. 179.
poecilus, *Dysdercus*.
Pogonochaerus fascicularis, on pines in Russia, II. 523.
Pogonomyrmex barbatus (Harvester Ant), bionomics of, in U.S.A., I. 180, III. 154, 334, 512, 577.
Poinciana, not attacked by *Pseudococcus filamentosus* in E. Africa, II. 146; *Xylotrupes gideon* (*australicus*) on, in Queensland, III. 491.
Poinciana regia (Flamboyant), *Xyleborus fornicatus* on, in Ceylon, II. 513; *Apate* (*Bostrychus*) *monacha* on, in Porto Rico, I. 389.
Pois Sabre (see *Canavalia ensiformis*).
Pokeweed, food-plant of red spider in U.S.A., II. 703.
Poland, insect pests in, I. 172, 346, 463, 485, II. 76, 177, 468, 514, 703, III. 394, 597, 609.
Polecat (*Spilogale interrupta*), destroying *Aegeria* (*Sanninoidea*) in U.S.A., II. 254.
Polia advena, on lettuce in France, I. 504.
Polia chi (see *Antitype*).
Polia dysodea, on lettuce in France, I. 504.
Polia filigramma, on Jerusalem artichoke, III. 33.
Polia flavicincta (see *Antitype*.)
Polia (*Aplecta*) *nebulosa*, on Jerusalem artichoke, III. 33.
Polia nevadae (Zebra Cutworm), on vegetables, etc., in Br. Columbia, II. 24.
Polia oleracea, on tomatoes in England, II. 26; on lettuce, etc., in France, I. 504, II. 16; on cabbage, etc., in Russia, I. 499, III. 403.
Polia (*Mamestra*) *persicariae*, on lettuce in France, I. 504; in Russia, III. 403.
Polia (*Mamestra*) *pisi*, on flax in France, III. 428; on apples in Holland, III. 742; on peas and lentils in Russia, III. 51, 393, 403, 481.
Polia polymita (see *P. filigramma*).
Polia suasa (*Mamestra dissimilis*), on lettuce in France, I. 504; intercepted on box from Holland, II. 186; parasites of, in Russia, II. 424, 523.
Poliaspis argentosus, sp. n., on *Coprosoma* in New Zealand, III 721.
Poliaspis casuarinae, on *Casuarina suberosa* in Australia, III. 80.
Poliaspis exocarpi, on *Exocarpus cupressiformis* in Australia, III. 80.
Poliaspis intermedia, in Australia, III. 80.
Poliaspis pini, intercepted on pine in California, III. 494.
Polistes, predaceous on *Alabama argillacea* in West Indies, III. 22.
Polistes annularis, predaceous on *Alabama argillacea* in West Indies, I. 83, II. 22, 88, 142, 144, III. 736.
Polistes annulatus, predaceous on *Protoparce cingulata* in West Indies, III. 22.
Polistes bellicosus, in West Indies, III. 736.
Polistes canadensis, predaceous on *Laphygma frugiperda* in Alabama, I. 518.
Polistes crinitus (Jack Spaniard), in West Indies, III. 736.
Polistes fuscatus instabilis, in the Leeward Islands, I. 83.
Polistes gallica, on vines in Italy, III. 112.
Polistes sagittarius, predaceous on locusts in Malaya, III. 467.
polita, *Amara*; *Mesogramma*.
politus, *Agrilus*; *Plagiognathus*.
polleniella, *Tritochaeta* (see *Zenillia pullata*).
pollinariella, *Aphelosetia*.
pollinosus, *Systates*.
Polybia nigriceps, predaceous on *Laphygma frugiperda* in Br. Guiana, I. 521.
Polybia occidentalis, in West Indies, III. 736.
Polycaon confertus (Olive Twig Borer), bionomics of, in U.S.A., I. 136, 418, II. 599, III. 275, 557, 625.
Polychaetoneura elyi, parasite of *Schizura concinna* in N. America, II. 496.
polychloros, *Vanessa*.
Polychrosis bicinctana, II. 542.

Polychrosis botrana (Vine Moth), in Algeria, II. 446, III. 427; lead arsenate against, in Australia, III. 158; bionomics and control of, in France, I. 70, 228, 311, 312, 409, 415, 416, 422, 451, 523, 524, II. 91, 194, 229, 233, 301, 359, 400, 405, 409, 410, 411, 421, 443, 445, 450, 510, 539, 552, 557, 587, 589, 607, 610, 611, 685, 686, III. 189, 522, 562, 614, 615, 616; bionomics and control of, in Germany, I. 5–10, II. 452, 499, 538, 668, III. 496; in Greece, I. 409; in Hungary, II. 309; bionomics and control of, in Italy, I. 397, II. 575, 635, 666, 679, III. 113, 124, 127; bionomics and control of, in Luxemburg, II. 135; in Portugal, I. 313; bionomics and control of, in Russia, I. 536, II. 211, 626, 692, 718, III. 26, 172, 209-212, 220, 399, 478, 602, 701; in Switzerland, I. 335-336; control of, in Tyrol, III. 497; in U.S.A., I. 54; natural enemies of, I. 71, 524, II. 91, 345, 360, 588, 589, 607, III. 211, 497.

Polychrosis viteana (Grape-berry Moth), bionomics and control of, in U.S.A., I. 112, II. 458, III. 181, 209, 691; considered identical with *P. botrana*, III. 209.

Polycystus propinquus, parasite of *Agromyza phaseoli* in Ceylon, III. 443.

polydrosis, *Eulophus*.

Polydrosus, on fruit in France, II. 449.

Polydrosus ferganensis, on fruit in Russia, II. 636, 714.

Polydrosus impressifrons, food-plants of, in U.S.A., I. 153.

Polydrosus obliquatus, on fruit in Russia, II. 636, 714.

Polydrosus sericeus, in orchards in Russia, III. 105.

Polygnotus hiemalis, parasite of *Mayetiola destructor*, II. 225, III. 416; mode of parasitism of, II. 599.

Polygnotus minutus, parasite of *Mayetiola destructor*, I. 216, III. 252; hyperparasites of, II. 66; mode of parasitism of, II. 599.

polygoni, *Gastroidea*.

Polygonia interrogationis, food-plants of, in Connecticut, III. 372.

Polygonum (Smartweed or Knot-grass), food-plant of pests in U.S.A., I. 124, 430, II. 251; *Otiorrhynchus ligustici* on, in S. W. Russia, II. 465; *Idiopterus nephrolepidis* on, in Britain, III. 762.

Polygonum aviculare (Knot-grass), food-plant of pests in Russia, II. 64, 212, 465, III. 538.

Polygonum convolvulus, II. 315; *Euxoa segetum* and *Feltia exclamationis* on, in Russia, II. 212.

Polygraphus longifolia, on pines in India, III. 729.

Polygraphus rufipennis, on Conifers in Canada, I. 407, II. 25, III. 43.

Polyhedral Disease (see *Microsporidium polyhedricum*).

polymita, *Polia* (see *P. filigramma*).

polymorpha, *Epilachna*.

Polynema bifasciatipenne, parasite of *Oecanthus* in U.S.A., II. 674.

Polynema longipes, predaceous on *Aphis avenae* in U.S.A., II. 697.

Polynema speciosissimum, sp. n., from Queensland, III. 256.

Polynema zolai, sp. n., from Queensland, III. 256.

Polynesia, *Oecophila smaragdina* in, III. 317.

polynesiale, *Limnerium*.

polynesialis, *Chalcis*.

Polyocha saccharella (see *Papua depressella*).

polyodon, *Actinotia* (*Chloantha*).

Polyphemothrips tibialis, sp. n., on privet in Florida and Louisiana, III. 631.

Polyphylla adspersa, in orchards in Turkestan, II. 73, 713, III. 604.

Polyphylla alba, in Astrachan, II. 614, III. 172, 222, 399.

Polyphylla fullo, food-plants of, in Hungary, II. 309; bionomics of, in Russia, I. 488, 494, II. 110, 260, 468, 692, III. 223, 226, 477, 601, 701.

Polyphylla tridentata, in Turkestan, II. 713.

Polypodium laevigatum, *Hemichionaspis aspidistrae* on, in Holland, III. 201.

Polypterus caliroae, sp. n., parasite of *Eriocampoides* sp. in U.S.A., III. 658.

Polyrrhabdotus transversalis, on cacao and rubber in E. Africa, I. 414, II. 283, III. 663.

Polyscytus oscinidis, parasite of *Oscinella frit* in Russia, I. 364.

Polysphincta koebelei, parasite of Lepidoptera in Hawaii, II. 629, III. 682.

Polysphincta ribesii, parasite of *Pteronus ribesii* in France, II. 622.

Polysticta briardi, on apple in Russia, III. 105.

Polysulphides, as insecticides, I. 237, 249, II. 297, 673, III. 430, 447; (see Barium, Calcium and Potassium).
polytes, Papilio.
polyxenes, Papilio.
pomedaxana, Poecilochroma.
Pomegranate (*Punica granatum*), pests of, in Egypt, I. 92, II. 321, 505, III. 749; *Helopeltis* on, in Gold Coast, II. 671; not attacked by *Ceratitis capitata* in Hawaii, I. 511; Aphis on, in Spain, III. 276; pests of, in U.S.A., I. 180, III. 23.
Pomegranate Butterfly (see *Virachola livia*).
Pomelo (see Grape Fruit).
pometaria, Alsophila.
pometellus, Ypsolophus (see *Dichomeris liqulella*).
pomi, Aphis; Seius.
pomonae, Apion.
pomonaria, Apocheima (*Biston*).
pomonella, Cydia (*Carpocapsa, Laspeyresia*); *Hymenobosmina*; *Rhagoletis.*
pomoriorum, Erythrocera (see *Prosopaea fugax*).
pomorius, Biston.
pomorum, Anthonomus; *Campoplex*; *Mytilaspis* (see *Lepidosaphes ulmi*); *Pimpla.*
Pomphopoea aenea, food-plants of, in U.S.A., I. 243, III. 687.
Pomphopoea unguicularis, food-plants of, in U.S.A., I. 243.
Pond-lily Aphid (see *Rhopalosiphum nymphaeae*).
ponderosae, Conophthorus; *Dendroctonus*; *Lachnus.*
Pongamia glabra, Pseudococcus filamentosus on, in E. Africa, II. 146.
Pontania amentivora, sp. n., on *Salix* in U.S.A., III. 658.
Pontania bozemani (Poplar Leaf-folder), in Montana, II. 537.
Pontania pedunculi, on willow in N. Italy, III. 124.
Pontania populi, on poplars in Ontario, II. 491.
Pontania vesicator, on osiers in Germany, II. 501.
Pontia (see *Pieris*).
pontbrianti, Azya.
Popillia discalis, on roses in Ceylon, II. 644.
Popillia hilaris, on cotton, etc., in E. Africa, I. 414, II. 1, 2, 579.
popino, Diplotaxis.
Poplar (*Populus*), *Vanessa polychloros* on, in Barbary, III. 427; pests of, in Britain, I. 433, II. 192, III. 676; *Melolontha* on, in Bukovina, II. 640; pests of, in Canada, I. 231, 298, 401, 407, 412, II. 491, III. 70, 507; *Bryobia* on, in Egypt, II. 505; pests of, in France, I. 167, 333, 472, II. 195, III. 10, 11; pests of, in Holland, I. 386, III. 742; pests of, in Italy, III. 124; *Cladius viminalis* on, in Norway, III. 697; pests of, in Russia, I. 208, 209, 460, 461, 495, 523, II. 45, 75, 265, 314, 443, 714, 718, III. 43, 45, 49, 105, 130, 138, 220, 224, 341, 401, 402, 535, 601, 610; pests of, in U.S.A., I. 35, 100, 153, 225, 381, 425, II. 185, 294, 343, 390, 634, 711, III. 86, 268, 414, 473, 515, 580, 668; (see also Aspen).
Poplar Borer (see *Saperda calcarata*).
Poplar Leaf-folder (see *Pontania bozemani*).
Poplar Petiole Gall-louse (see *Pemphigus populi-transversus*).
Poplar Sawfly (see *Trichiocampus viminalis*).
Poppy (*Papaver*), *Barypithes pellucidus* on, in England, III. 288, 564; *Orchestes fagi* on, in Holland, III. 743; pests of, in Russia, I. 487, 539, III. 481, 640; *Aphis rumicis* (*euonymi-papaveris*) on, I. 78, 188, II. 494, 660, III. 749.
popularia, Phylloxera.
popularis, Tholera.
populator, Cenocoelius.
populi, Amorpha (*Smerinthus*); *Bytiscus*; *Chaetophorus*; *Melasoma* (*Lina*); *Pontania.*
populicaulis, Thecabius (*Pemphigus*).
populicola, Chaitophorus.
populiconduplifolius, Thecabius (*Pemphigus*).
populifoliae, Aphis.
populifoliella, Phyllorycter (*Lithocolletis*).
populimonilis, Pemphigus.
populi-transversus, Pemphigus.
populnea, Saperda.
Populus (see Poplar).
Populus alba (Silver Poplar), pests of, in Russia, III. 402, 608.
Populus angustifolia, Pemphigus betae on, in U.S.A., III. 578.
Populus balsamifera (Balsam Poplar, Balm of Gilead), *Phyllorycter* (*Lithocolletis*) *populifoliella* on, in Russia, II. 443; pests of, in U.S.A., II. 634, III. 578, 669.
Populus canadensis, Pemphigus canadensis on, in Argentina, III. 54.
Populus coccinea, Asiphum pseudobyrsa on, in Colorado, II. 634.
Populus deltoides (see Cottonwood).
Populus fremonti, Phylloxera populiaria on, in California, III. 686.

Populus nigra, Aphids on, in Germany, II. 124; pests of, in Russia, III. 222.
Populus occidentalis, *Thecabius populiconduplifolius* on, in Colorado, III. 351.
Populus pyramidalis, Aphids on, in Germany, II. 124; *Aulacaspis pentagona* on, in Italy, I. 222.
Populus suaveolens, *Phyllorycter* (*Lithocolletis*) *populifoliella* on, in Russia, III. 402.
Populus tremula, *Pachypappa vesicalis* on, in Russia, III. 608; (see Aspen).
Populus trichocarpa, *Phylloxera popularia* on, in California, III. 686.
Porcellio dilatatus, in the Channel Islands, II. 598.
Porcellio laevis, on strawberries in the Channel Islands, II. 598.
Porcellio pictus, in the Channel Islands, II. 598.
Porcellio scaber, on ferns and orchids, II. 598.
Porcellionides pruinosus, on lettuce in the Channel Islands, II. 598.
Porina cervinata, bionomics of, in New Zealand, III. 706.
Porina signata, on flax in New Zealand, III. 707.
Porina umbraculata, bionomics of, in New Zealand, III. 706.
Porizon, parasite of *Epinotia piceaeana* in U.S.A., I. 200.
porosa, *Gerstaeckeria*.
Porosagrotis delorata (see *P. orthogonia*).
Porosagrotis orthogonia, on crops in Canada, II. 381, 488, III. 565, 620, 629.
Porosagrotis vetusta (Spotted-legged Cutworm), on vegetables, etc., in Canada, II. 24.
porosus, *Myzus*.
Porpe bjerkandrella (Artichoke Moth) on artichokes in Mauritius, III. 160, 731.
porrecta, *Phonapate*.
Porthesia auriflua (see *Euproctis*).
Porthesia chrysorrhoea (see *Euproctis*).
Porthesia dispar (see *Lymantria*).
Porthesia producta (see *Euproctis*).
Porthesia similis, in Russia, III. 393.
Porthesia virguncula, on cotton in Africa, II. 1; on coffee in Far East, II. 490.
Portlandia grandiflora, *Caprinia conchylalis* on, in Ceylon, II. 192.
Porto Rico, III. 365, 761; insect pests in, I. 83, 165, 324, 389, 390, III. 81, 476, 516, 585; pests of sugar-cane in, I. 103, 181, 184, 263, 343, II. 48-50, 70, 284, 308, 639, 693, III. 134, 673, 680; parasites of sugar-cane pests in, III. 17, 26, 383; new Tachinids from, II. 496; Thysanoptera in, I. 343, II. 130; new parasitic Hymenoptera from, II. 288, III. 26, 151; *Heilipus lauri* absent from, II. 189.
portoricensis, *Coccidoxenus*.
Portugal, I. 325, 392; insect pests in, I. 313, III. 354, 364, 566; *Icerya purchasi* on citrus, in, I. 172, 354, 392; pests of vines in, I. 100, 468; Aphids of, III. 90.
posterana, *Phalonia*.
postica, *Hypera* (*Phytonomus*) (see *H. variabilis*); *Orgyia*; *Tomaspis*.
postvittana, *Tortrix* (*Archips*, *Cacoecia*).
Potash, formulae containing, II. 234, 282, III. 155, 170; effect of, on *Eriophyes violae*, III. 202.
Potash Soap, and nicotine, I. 251.
Potassium Arsenate, against asparagus miner, I. 295; in formula against melon-fly, III. 36; ingredient of Berlese formula against olive-fly, I. 271; against *Rhagoletis pomonella*, III. 38.
Potassium Arsenite, experimental injection of, into apple trees against *Eriosoma lanigerum*, III. 395; less effective than copper sulphate against olive-fly, II. 479.
Potassium Carbonate, formulae containing, against *Hylotoma rosae*, I. 335, II. 231, 234; in formula against woolly aphis, III. 170.
Potassium Cyanide (see Hydrocyanic Acid).
Potassium Ferrocyanide, for testing Bordeaux mixture, II. 71.
Potassium Permanganate, against *Chortophila brassicae*, III. 101; for disinfecting imported potatoes, II. 300; against *Psila rosae*, III. 200; cost of, against *Tetranychus telarius* (*bimaculatus*), I. 353.
Potassium Phosphate, manuring with, against *Xyleborus* and *Scolytus*, I. 340, II. 563.
Potassium Polysulphide (Liver of Sulphur), against *Chrysomphalus dictyospermi*, III. 430; as an insecticide, II. 209; less effective than lime-sulphur, II. 673.
Potassium Sulphide, III. 283; against spider mites, I. 223, 353, II. 704, III. 489; and soap against vine pests, II. 607; in powder against *Otiorrhynchus ovatus*, III. 7.

Potassium Sulpho-carbonate, for disinfecting vines, II. 336; against underground pests, I. 481, II. 363; preparation of, III. 688; against *Polia oleracea*, II. 16; against carnation pests, III. 14; against *Hylemyia antiqua*, III. 189; against *Eriosoma lanigerum*, III. 396.
Potassium-sulphur Compounds, against *Aspidiotus perniciosus*, III. 737.
Potato (*Solanum tuberosum*), new South American weevils on, I. 546, II. 241, 460; pests of, in Argentina, II. 296; pests of, in Australia, I. 193, 377, II. 117-119, 435, 584, 705; pests of, in Austria, II. 429; *Pseudococcus* spp. on, in E. Africa, II. 429; pests of, in Brazil, II. 173; pests of, in Britain, I. 434, II. 498, 598, 655, III. 287, 460, 550, 715; pests of, intercepted in California, III. 420; pests of, in California, III. 624; pests of, in Canada, I. 48, 243, 299, 301, 400, 412, 476, II. 491, 664, 676, III. 69, 70, 552, 678; pests of, in Denmark, III. 247, 699; *Rhopalosiphum dianthi* on, in Egypt, III. 749; not attacked by *Barypithes pellucidus* in England, III. 288, 564; pests of, in France, I. 103, 229, II. 400-402, 557; pests of, in Germany, II. 640, 711, III. 712; pests of, in Hawaii, II. 630; *Phthorimaea operculella* intercepted on, in Hawaii, III. 657; *Hydroecia micacea* on, in Holland, III. 198, 200; pests of, in India, II. 139, III. 145, 321, 323; pests of, in Italy, II. 511, III. 124; pests of, in New Zealand, III. 707, 721; pests of, in Peru, I. 546, II. 241, 280, 460; pests of, in Philippines, I. 482; pests of, in Portugal, I. 313, 314; regulations restricting importation of, into Rhodesia, II. 163, 273; pests of, in Russia, I. 494, II. 44, 73, 248, 266, 341, 366, III. 46, 119, 172, 221, 480, 537; not attacked by *Euxoa segetum* and *Oria musculosa* in Russia, II. 171, 319, 392, III. 5; pests of, in S. Rhodesia, I. 288, II. 162, 706, III. 359-361; pests of, in Sweden, III. 208, 435; pests of, in U.S.A., I. 53, 55, II. 121, 159-161, 185, 280, 301, 302, 303, 418, 435, 436, 459, 537, 543, III. 89, 179, 193, 194, 268, 328, 335, 352, 418, 459, 471, 494, 547, 581, 624, 688; failure to inoculate, with mosaic disease of tobacco, I. 19.
Potato Aphis (see *Macrosiphum solanifolii*).
Potato Beetle, Colorado (see *Leptinotarsa decemlineata*).
Potato Blight (see *Phytophthora*).
Potato Flea-beetle (see *Epitrix cucumeris*).
Potato Flea-beetle, Western (see *Epitrix subcrinita*).
Potato-leaf Beetle (see *Psylliodes affinis*).
Potato Looper Moth (see *Phytometra verticillata*).
Potato Moth (see *Phthorimaea operculella*).
Potato-stalk Borer (see *Hydroecia micacea*).
Potato Thrips (see *Thrips tabaci*).
Potato Tingid (see *Recaredus*).
Potato Tuber Moth (see *Phthorimaea operculella*).
Potato Weevil (see *Desiantha nociva* and *Rhigopsidius tucumanus*).
Potentilla glandulosa, *Otiorrhynchus ovatus* on, in Br. Columbia, I. 93.
pothi, *Aonidiella*.
Pothos scandens, *Aonidiella pothi* on, in Ceylon, III. 168.
Pothyne, on *Ficus* in Java, II. 535.
Potosia marginicollis, on fruit in Russia, II. 715.
Powder Post Borer (see *Lyctus brunneus*).
praecellens, *Phalacropteryx*.
praefectata, *Xanthorhoë*.
praefica, *Prodenia*.
praelonga, *Orthezia*.
praemorsus, *Leptostylus*.
praepallens, *Calamistes*.
Praepodes (see *Prepodes*).
praeusta, *Tetrops*.
praeustus, *Xylonites*.
praevidens, *Aphycus*.
Prairie Chicken (see *Tympanuchus americanus*).
Praon abjectus, parasite of *Aphis rumicis* (*euonymi*) in France, II. 620.
Praon flavinode, pasasite of *Hyalopterus pruni*, II. 81.
Praon volucre, parasite of *Rhopalosiphum ribis*, II. 81.
prasina, *Palomena*.
prasinana, *Hylophila* (*Halias*).
pratensis, *Bryobia* (see *B. pretiosa*); *Lygus*; *Paratetranychus*.
praticola, *Anomala*.
Prays chrysophyllae, sp. n., on olive in Africa, III. 432.

Prays citri, and its control on citrus in Italy, II. 97, III. 143; on orange in Philippines, II. 116; not present in U.S.A., II. 116, III. 144.
Prays nephelomima (see *P. citri*).
Prays oleellus (Olive Moth), in South of France, I. 229, II. 421; in Italy, I. 391; in Palestine, II. 623; in Portugal, I. 314; parasitised by *Ageniaspis fuscicollis*, III. 147.
Precis (*Junonia*) *almana*, on rice in Far East, II. 489.
Precis lavinia zonalis, on sweet potatoes in Antigua, I. 258.
Premnotrypes solani, sp. n., on potatoes imported into U.S.A. from S. America, II. 241.
Prenes ares, on sugar-cane in Porto Rico, III, 134.
Prenes nero, on sugar-cane in Porto Rico, I. 184, II. 49.
Prenolepis fulva, tending *Pseudococcus sacchari* in Porto Rico, I. 185.
Prenolepis imparis, associated with *Thelia bimaculata* in U.S.A., III. 580.
Prenolepis longicornis, imported on fruit from Guatemala, I. 325.
Prepodes vittatus (Fiddler Beetle), bionomics of, in West Indies, I. 165, 253.
pretiosa, Bryobia; *Ceratitis*; *Tragocephala.*
pretiosum, Trichogramma (see *T. minutum*).
pretiosus, Dysdercus.
preussi, Oryctes; *Pimelopus.*
Prickly Ash (*Xanthoxylon fraxineum*), pests of, in Florida, III. 23, 326.
Prickly Pear, pests of, in S. Africa, I. 79, II. 440; pests of, in Australia, I. 79, III. 125; *Ceratitis capitata* on, in Bermuda, III. 171; enemies of, introduced into Mauritius, II. 612; insect enemies of, suitable for introduction into Queensland, III. 125–127; report on natural enemies of, III. 126; (see *Opuntia*).
prima, Abbella (*Brachistella*); *Pseudhomalopoda.*
Primrose, *Diabrotica longicornis* on, in U.S.A., I. 430.
Primula obconica, woodlice on, in Ontario, II. 491.
princeps, Coccophagus; *Dirphya* (*Nitocris*).
Prionoryctes caniculus, on yams in S. Nigeria, II. 108.
prionoxysti, Amersibia.
Prionoxystus, parasitised by *Amersibia prionoxysti* in U.S.A., III. 658.
Prionoxystus robiniae (Carpenter Worm), in Canada and U.S.A., II. 662, III. 585.
Prionus asiaticus, in orchards in Astrachan, III. 221.
Prionus californicus, bionomics of, on fruit trees in U.S.A., III. 16, 271, 580.
Prionus coriarius, in oak logs in England, III. 762.
Prionus imbricornis, on oak and chestnut in U.S.A., III. 579.
Prionus laticollis, food-plants of, in U.S.A., III. 579, 580.
Priophorus (*Cladius*) *padi*, on plums in Britain, II. 563, III. 659; on strawberries in France, II. 285, 421; on cherry in Russia, I. 490, III. 47, 604.
Pristiphora appendiculata (see *P. pallipes*).
Pristiphora pallipes (*Nematus appendiculatus*), on gooseberries and currants in Russia, III. 222, 225, 399, 640, 642.
Pristiphora ruficornis, on *Ribes* in Russia, III. 389.
Pristomeridia agilis, parasite of *Mineola vacciniana* in U.S.A., III. 532.
Pristomerus schreineri, parasite of *Cydia pomonella* in Russia, I. 366.
Pristomerus vulnerator, parasite of *Lymantria dispar* in Russia, I. 362, 481.
Pristoscelis texanus (see *Trichochrous*).
Privet (*Ligustrum vulgare*), pests of, in S. Africa, I. 279, II. 276; pests of, in Russia, III. 210, 610; pests of, in U.S.A., I. 186, II. 188, III. 23, 306, 357, 631; not attacked by *Lymantria dispar* in U.S.A., III. 669.
Privet, Chinese (see *Ligustrum ibota*).
procerus, Opius.
processionea, Cnethocampa.
Prochiloneurus pulchellus, gen. et sp. n., parasite of *Pseudococcus* in Eritrea, III. 433.
procincta, Hadena (*Dargida, Eupsephopactes*).
Prociphilus alnifoliae, on *Amelanchier alnifolia* in Colorado, III. 351.
Prociphilus bumeliae, food-plants of, in Oregon, III. 588.
Prociphilus corrugatans, on *Crataegus* and *Amelanchier* in U.S.A., III. 351, 423.
Prociphilus fraxini-dipetalae, bionomics of, in U.S.A., III. 588, 686.
Prociphilus nidificus, on ash, in England, III. 633.

Prociphilus tessellatus, on maple in U.S.A., III. **709.**
Prociphilus venafuscus, on *Fraxinus* in U.S.A., I. **141.**
Prococcophagus varius, sp. n., in Eritrea, III. **433.**
Procris (*Ino*) *ampelophaga*, on vine in Italy, III. **112**; bionomics of, in vineyards in Russia, I. **363, 460,** II. **355,** III. **477, 478, 602, 613.**
Procrustes coriaceus, killed by toxin in blood of *Galerucella luteola*, III. **252.**
Proctacanthus brevipennis, predaceous on wireworms in S. Carolina, III. **693, 710.**
Proctacanthus milberti, predaceous on *Colias eurytheme* in U.S.A., III. **154.**
Prodecatoma cruzi, enemy of *Erethistes lateralis* in Brazil, III. **306.**
Prodenia, on cotton in E. Africa, I. **414**; food-plants of, in Dutch E. Indies, III. **644**; parasitised by *Trichogramma pretiosum* in Sumatra, I. **13**; controlled by birds in Trinidad, II. **574.**
Prodenia eridania (see *Xylomyges*).
Prodenia littoralis (see *P. litura*).
Prodenia litura (Cotton Worm), on cotton in Africa, II. **1, 580,** III. **124**; on apple in Australia, III. **492**; on tobacco, etc., in Dutch E. Indies, III. **202, 312**; on maize and cotton in Egypt, I. **501,** II. **105, 505**; on tobacco, etc., in Far East, II. **490**; failure to infect with *Microsporidium polyhedricum* in India, III. **146**; in Mauritius, II. **612**; on cacao and maize in Nigeria, II. **107,** III. **166, 663**; on tobacco, cotton, etc., in Nyasaland and Rhodesia, I. **272,** II. **277,** III. **360**; on tobacco and maize in Philippines, I. **154, 314, 481, 482.**
Prodenia ornithogalli, in Porto Rico, III. **477**; parasitised by *Hyposoter interjectus* in U.S.A., III. **151.**
Prodenia praefica (Yellow-striped Cutworm), on lucerne in California, II. **663.**
producta, Euproctis (*Porthesia*).
productus, Ichneumon; *Tetrastichus.*
Profenusa collaris, sp. n., on cherries etc., in U.S.A., I. **154,** III. **77.**
profligator, Cryptus.
Progenius bidentatus, on *Pterocarpus indicus* in India, III. **723.**
Progenius laeviusculus, on *Pterocarpus indicus* in the Andamans, III. **723.**
Progne subis, destroying insects in Ottawa, II. **307.**
Prolasioptera (*Lasioptera*) *cerealis*, on grain crops in Russia, II. **172,** III. **206, 481.**
proleucella, Cryptoblabes.
Promecotheca antiqua (Solomon Islands Coconut Hispid), on coconut in South Sea Is., II. **2,** III. **27**; distribution of, II. **690.**
Promecotheca biroi, in New Guinea, III. **27.**
Promecotheca callosa (Queensland Coconut Hispid), on coconut in N. Australia, III. **27.**
Promecotheca coeruleipennis (Fiji Coconut Hispid), on coconut in Fiji, III. **27**; remedies against, II. **691.**
Promecotheca cumingi, on coconut in the Philippines, I. **118, 311.**
Promecotheca lindingeri, on coconut in Samoa, II. **270.**
Promecotheca opacicollis (New Hebrides Coconut Hispid), on coconut in Australia, II. **690,** III. **27**; on coconut in South Sea Is., II. **2.**
Promecotheca papuana, in New Guinea, III. **27.**
Promecotheca reichei, on coconut in the South Sea Is., II. **2.**
Promecotheca varipes (Port Darwin Coconut Hispid), on *Pandanus*, III. **27.**
promethea, Callosamia.
pronuba, Agrotis (*Tryphaena*).
pronubana, Tortrix.
Prophanurus alecto, parasite of *Diatraea* in Br. Guiana, II. **497, 520, 568,** III. **28.**
Prophanurus beneficiens (see *Phanurus*).
Prophanurus dalmani, not a parasite of *Orgyia antiqua* in Russia, III. **640.**
Prophanurus (*Telenomus*) *minutissimus*, parasite of Noctuids in Br. Guiana, II. **497, 520.**
Prophanurus terebrans, parasite of *Malacosoma neustria* in Russia, III. **640.**
Prophanurus thais, parasite of Pentatomid bug in Br. Guiana, II. **520.**
propinquella, Pinaris (*Depressaria*).
propinquus, Polycystus.
Propylaea 14-*punctata* var. *tetragonata*, predaceous on Aphids in Russia, III. **220.**
proscarabaeus, Meloë.
Prosodes, destroying locusts in Turkestan, II. **509.**
Prosopaea fugax, parasite of *Hyponomeuta malinellus* in Rumania, III. **344.**

Prosopis glandulosa, Oncideres putator on, in U.S.A., III. 475.
Prosopis juliflora (Mesquite), foodplant of *Amphicerus punctipennis* in California, II. 113; *Taenipoda picticornis* on, in Arizona, I. 179, II. 542.
Prosopothrips cognatus, bionomics of, in U.S.A., III. 577.
Prospaltella, parasite of *Aspidiotus perniciosus* in U.S.A., III. 417.
Prospaltella aurantii, parasite of *Hemichionaspis minor* in Peru, I. 323; parasite of *Aspidiotus perniciosus*, II. 165, III. 192.
Prospaltella berlesei, use of for controlling *Aulacaspis pentagona* in Italy, etc., I. 147, 189, II. 124, 128, 207, 292, 403, 441, 477, 526, 592, III. 5, 251, 256, 524, 740.
Prospaltella lahorensis, parasite of *Aleurodes citri* in India, I. 278.
Prospaltella perniciosi, parasite of *Aspidiotus perniciosus* in U.S.A., I. 160, II. 384, 625, III. 130, 473.
Prospaltella peruviana, parasite of *Hemichionaspis minor* in Peru, I. 157, 323.
Prosternon holosericeum, in Russia, II. 466.
Protaetia carneola, in S. Rhodesia, III. 174.
Protapanteles, parasite of *Argyresthia alternatella* in U.S.A., III. 581.
Protapanteles flaviconchae (see *Apanteles*).
Proteopteryx willingana, in Saskatchewan, III. 507.
proteus, Eudamus; *Parlatoria*.
Protococcus pluvialis, destroyed by *Limax arborum*, II. 572.
Protodiaspis anomala, sp. n., on *Acacia* in Australia, III. 548.
protodice, Pieris.
Protolachnus tuberculostemmata, sp. n., on *Pinus* from Egypt, III. 749.
Protoparce (*Phlegethontius*), control of, on potatoes in U.S.A., I. 352, 601, III. 328.
Protoparce (*Phlegethontius*) *celeus*, on tomato in U.S.A., I. 476.
Protoparce cingulata (Sweet Potato Sphinx), in West Indies, I. 83, II. 88; on sweet potato and beans in Florida, III. 22.
Protoparce convolvuli (see *Herse*).
Protoparce quinquemaculata (Tobacco Sphinx), in Hawaii, II. 630; bionomics of, in U.S.A., II. 601, III. 178, 268.
Protoparce sexta (Tomato Sphinx, Southern Hornworm), bionomics of, in U.S.A., I. 54, II. 601, III. 178, 268, 472; on tomato and tobacco in Porto Rico, III. 477; not controlled by birds in Trinidad, II. 574.
protospirae, Pemphigus.
provancheri, Idiocerus.
provincialis, Aspidiotus.
proxima, Hemichionaspis.
pruininus, Bruchus.
pruinosum, Eulecanium.
pruinosus, Podabrus; *Porcellionides*.
prunaria, Angerona.
prunastri, Eulecanium (*Lecanium*).
Prune, pests of, in Germany, II. 499, 500; pests of, in New South Wales, I. 159; *Rhynchites auratus* on, in Russia, I. 440; pests of, in U.S.A., I. 134, 135, 241, 384, 413, 426, II. 83, 113, 117, 244, 247, 300, 439, 555, 599, 707, III. 16, 150, 257, 258, 259, 267, 270, 275, 351, 493.
Prune Aphis (see *Aphis prunifoliae* and *Hyalopterus arundinis*).
Prune Twig Borer (see *Anarsia lineatella*).
pruni, Aphis; *Hyalopterus* (see *H. arundinis*); *Scolytus*.
pruniana, Olethreutes (*Antithesia, Penthina*).
prunicola, Aphis; *Phyllosticta*.
prunifolii, Aphis.
prunina, Aphis.
prunivora, Enarmonia.
prunivorella, Parornix (*Ornix*).
prunorum, Aphis.
Prunus, Aulacaspis pentagona intercepted on, in California, III. 626; *Aspidiotus perniciosus* on, in Japan, II. 281; list of Aphids found on, in Russia, II. 79; pests of, in U.S.A., II. 94, III. 77, 375; *Chaitophorus populi* on, III. 749.
Prunus americana, Eulecanium nigrofasciatum on, in Canada, III. 552.
Prunus armeniaca (see Apricot).
Prunus avium (Bird Cherry), *Aphis avenae* on, in Norway, III. 697; pests of, in U.S.A., II. 485, III. 87.
Prunus capuli, Aulacaspis pentagona on, in Italy, I. 222.
Prunus cerasus (see Cherry).
Prunus divaricata, Pachydissus sartus on, II. 714.
Prunus domestica, Aphis pruni on, in Germany, II. 406; *Pseudococcus adonidum* on, II. 436; (see Plum).
Prunus insitia (Bullace), *Aphis pruni* on, in Germany, II. 406; Aphids on, in Russia, II. 80.
Prunus laurocerasus, Aulacaspis pentagona on, in Italy, I. 222.
Prunus mahaleb, Hyponomeuta cognatellus on, in Russia, I. 346.

Prunus padus (Bird Cherry), *Aphis padi* on, in Holland, I. 386; pests of, in Norway, III. 254, 697; pests of, in Russia, III. 172, 204, 222, 535, 605.
Prunus pennsylvanica (Pin Cherry), pests of, in U.S.A., III. 87.
Prunus serotina (Wild Black Cherry), *Aphis tuberculata* on, in Maine, III. 423; spraying experiments with, I. 176.
Prunus spinosa (Sloe), *Papilio feisthameli* on, in Barbary, III. 427; *Aphis infuscata* on, in England, III. 633, 676; *Aphis pruni* on, in Germany, II. 406; pests of, in Russia, II. 80, III. 46, 210, 533-535; *Phorodon humuli* on, in U.S.A., I. 241.
Prunus virginiana (Choke Cherry), pests of, in U.S.A., I. 90, II. 485, 675, 711, III. 423.
Psalidium maxillosum, bionomics of, on beet and cereals in Russia, I. 478, II. 178, 465, III. 342, 601.
Psalis (*Dasychira*) *securis*, on sugar-cane and rice in India and Far East, I. 169, II. 68, 489.
Psallus ambiguus, on apples in England, II. 659; on fruit trees in Norway, III. 107.
Psamma arenaria (Marram Grass), *Cneorrhinus plagiatus* on, in Britain, III. 501; *Aspidiotus provincialis* on, in France, II. 425.
Psammodes, on tobacco in Rhodesia, I. 289.
Psammophila, predaceous on *Malacosoma fragilis* in U.S.A., III. 16.
Psecadia pusiella (see *Ethmia*).
psenes, *Blastophaga*.
Psenocerus supernotatus (American Currant Borer), on red currant in Missouri, III. 181.
Pseudagrilus sophorae, on cotton in Nigeria, III. 164.
Pseudanthonomus validus (Currant Fruit Weevil), bionomics of, on currants and gooseberries in U.S.A., II. 380, 537, III. 335.
Pseudaonidia articulatus (see *Selenaspidus*).
Pseudaonidia clavigera, on mangos imported from Java, II. 460.
Pseudaonidia duplex, intercepted on camellia, etc., in California, III. 455, 690.
Pseudaonidia ferox, var. *perspinosa*, nov., in French Guinea, II. 353.
Pseudaonidia irrepta, sp. n., in Ceylon, III. 168.
Pseudaonidia oreodoxae, sp. n., food-plants of, in Ceylon, III. 168.
Pseudaonidia paeoniae, intercepted on holly in California, III. 558; imported into New Jersey on azaleas from Japan, III. 117, 354.
Pseudaonidia tesserata, on *Cassia fistula* in Barbados, II. 533.
Pseudaonidia trilobitiformis, on citrus in E. Africa, I. 415; on cacao in West Indies, I. 97; imported on mangos, citrus, etc., into U.S.A., II. 460, III. 455, 494.
Pseudapanteles nigripes, parasite of *Acrocercops strigifinitella* in U.S.A., III. 415.
pseudaspidiotus, *Parlatoria*.
pseudexpansum, *Lecanium*.
Pseudhomalopoda prima, sp. n., parasite of scale-insects in Jamaica, III. 724.
Pseudischnaspis (*Aspidiotus*) *bowreyi*, on *Agave* in Barbados, II. 533.
Pseudleptomastix squamulatus, sp. n., parasite of mealy bugs in U.S.A., III. 724.
Pseudobrachysticha semiaurea, sp. n., parasite of *Hilda breviceps* in the Philippines, III. 621, 753.
Pseudobracon nigripennis, sp. n., from Lagos, II. 346.
Pseudobracon silvestrii, sp. n., from Lagos, II. 346.
pseudobrassicae, *Aphis*.
pseudobyrsa, *Asiphum*.
pseudocardui, *Aphis*.
pseudococci, *Acaroletes*; *Epidinocarsis*.
Pseudococcus (Mealy Bug), on carnations in Australia, III. 470; on spruce in Br. Columbia, I. 91; *Brachyacantha decempunctata* predaceous on, in Br. Guiana, II. 520; legislation against, in Br. Guiana, III. 175; on indigo in Ceylon, II. 644; parasitised by *Diadiplosis coccidivora* in Ceylon, II. 271, 651; parasites of, in Eritrea, III. 433; on egg-plant in Guam, III. 373; parasitised by *Gitonides perspicax* in Hawaii and the Philippines, III. 247; on sugar-cane in Hawaii, III. 17; in Natal, I. 270; on cacao in Uganda, II. 592, III. 752; in U.S.A., II. 272, III. 625; relation of, to *Iridomyrmex humilis* in U.S.A., III. 382; on plants imported into U.S.A., II. 186, 460, III. 117, 355, 469, 494; parasites of, in U.S.A., III. 494, 724, 725; in West Indies, III. 73, 411, 476; quarantine measures against, in West Indies, III. 555; methods of controlling, III. 459, 501, 762.

Pseudococcus aceris (see *Phenacoccus*).
Pseudococcus adonidum(*longispinus*) (Long-tailed Mealy Bug), I. **307**; on rubber in E. Africa, I. **415**; on *Manihot glaziovii*, in Belgian Congo, III. **648**; food-plants of, in California, II. **436**; intercepted on palms, etc., in California, III. **626, 739**; on coffee in Columbia, II. **708**; on vines in England, II. **628**; on coffee in Java, III. **646**; bionomics of, in Nigeria, II. **203**, III. **165**; on coffee in Réunion, II. **216**; on vines in Russia, III. **26**; in U.S.A., III. **761**.
Pseudococcus affinis (Tuber Mealy Bug), on potatoes etc., in California, II. **435**.
Pseudococcus agrifoliae, I. **307**; on *Cupressus* and cedar in California, II. **435**.
Pseudococcus ananassae, III. **17**.
Pseudococcus andersoni, food-plants of, in California, II. **435**.
Pseudococcus artemisiae, on *Artemisia californica* in California, II. **247, 435**.
Pseudococcus aurilanatus (Golden Mealy Bug), food-plants of, in California, II. **435**, III. **151**.
Pseudococcus azaleae, on azalea imported from Japan, II. **435**.
Pseudococcus bakeri (Walnut Mealy Bug), food-plants of, in California, I. **324**, II. **247, 435**, III. **121, 494, 625**.
Pseudococcus bicaudatus (see *P. virgatus*).
Pseudococcus bromeliae, intercepted on pineapples in California, III. **420, 494, 558, 625, 690, 739**; associated with *Pheidole megacephala* in Hawaii, I. **374**, III. **17**; on pineapple in St. Vincent, III. **412**.
Pseudococcus calceolariae (Pink Mealy Bug), on rice and sugar-cane in Br. Guiana, I. **522**, II. **58, 568**; present in Hawaii, III. **17**; associated with ants in Java, III. **663**; on sugar-cane in Mauritius, I. **31**; on sugar-cane in U.S.A., I. **104, 139, 225, 326**; intercepted on sugar-cane in U.S.A., III. **455**; on sugar-cane in West Indies, II. **31**, III. **22, 134**.
Pseudococcus capensis (see *Dactylopius confusus capensis*).
Pseudococcus citri (Citrus Mealy Bug, Common Mealy Bug), on coffee in E. Africa and Uganda, I. **415**, II. **283, 429, 570, 581, 591**, III. **752**; on sugar-cane, citrus, etc., in Br. Guiana, I. **522**, II. **417, 520, 569**, III. **663**; bionomics and control of, in California, I. **307, 325**, II. **247, 435**, III. **85, 121, 150, 151, 349, 493, 557, 622, 689, 761**; intercepted in California, III. **558, 626**; in Chile, I. **138**; measures against, on vines in England, II. **101, 628**, III. **101, 501**; on cacao in Grenada, III. **583**; on tobacco in Hawaii, II. **630**; bionomics of, in Java, III. **646, 648**; bionomics and control of, on citrus fruit in the Mediterranean region, I. **99, 278, 297**, II. **97, 230**, III. **143, 633**; on cacao in Nigeria, II. **107**, III. **663**; in Peru, III. **135**; parasites of, in Philippines, III. **724**; on cacao in Samoa, II. **555**; ants associated with, I. **150, 389**, II. **567**, III. **663**; lime-sulphur useless against, II. **609**; natural enemies of, II. **243, 253, 288, 437, 520**, III. **121, 143, 150, 349, 493, 557, 633, 724**.
Pseudococcus cockaynei, sp. n., on *Aciphylla* in New Zealand, III. **721**.
Pseudococcus crawii, in California, I. **307**, II. **247, 435**.
Pseudococcus crotonis, ants little associated with, in Java, III. **663**.
Pseudococcus cupressi, food-plants of, in California, II. **435**.
Pseudococcus dudleyi, on *Cupressus macnabiana* in California, II. **435**.
Pseudococcus ephedrae, on *Ephedra californica* in California, II. **435**.
Pseudococcus filamentosus (*Dactylopius perniciosus*), on cotton, etc., in E. Africa, I. **246, 415**, II. **146, 147, 581**; on lebbek trees in Cairo, I. **121**, II. **146**; on hibiscus, citrus, etc., in St. Vincent, III. **412**.
Pseudococcus gahani, sp. n., on *Ribes sanguinea* in Britain, III. **754**.
Pseudococcus grassii, sp. n., on bananas in Rome, II. **346**.
Pseudococcus hymenocleae, probably synonym of *P. artemisiae*, II. **435**.
Pseudococcus indicus (see *Dactylopius confusus indicus*).
Pseudococcus laurinus (*Lecanium lauri*), on *Laura nobilis* in France, I. **376**.
Pseudococcus longispinus (see *P. adonidum*).
Pseudococcus marchali (see *P. virgatus*).
Pseudococcus maritimus, in Java, I. **150**; on *Eriogonum latifolium* at Santa Cruz, II. **436**.

Pseudococcus nipae (Coconut Mealy Bug), on coconut in West Indies, II. 87, III. 411; on coconut in Br. Guiana, II. 417; on Kentia palms in Vienna, II. 482.
Pseudococcus oamaruensis, sp. n., on *Aquilegia* in New Zealand, III. 721.
Pseudococcus obscurus, in California, I. 307, II. 436; not suitable for introduction into Australia against prickly pear, III. 126.
Pseudococcus (*Phenacoccus*) *obtusus*, on cotton, etc., in E. Africa, I. 258, II. 429, 581, III. 125.
Pseudococcus perniciosus (see *P. filamentosus*.
Pseudococcus pseudonipae, food-plants of, in California, II. 436; intercepted on palms in California, III. 420; intercepted on palms in Hawaii, III. 548.
Pseudococcus quercus, on *Quercus chrysolepis* in California, II. 436.
Pseudococcus ryani, food-plants of, in California, II. 436; imported into U.S.A., on *Sciadopitys verticillata* from Japan, III. 455.
Pseudococcus sacchari (Sugar-cane Mealy-bug), on sugar-cane in Br. Guiana, I. 522; on sugar-cane in West Indies, I. 20, 21, 103, 185, II. 31, 48, 145, III. 134; on sugar cane in Mauritius, II. 46; natural enemies of, I. 21, 185, II. 48; on sugar-cane in Hawaii, III. 17; on sugar-cane in Java, III. 318.
Pseudococcus sacchari brasiliensis, subsp. n., on sugar-cane in Pernambuco, II. 206.
Pseudococcus saccharifolii, parasitised by *Aphycus terryi* in Hawaii, II. 20; on sugar-cane in Hawaii, III. 17.
Pseudococcus salinus, on grasses in California, II. 436.
Pseudococcus sequoiae, on *Sequoia sempervirens* in California, II. 436.
Pseudococcus sexaspinus, sp. n., on sedge in New Zealand, III. 721.
Pseudococcus solani, food-plants of, in California, II. 248, 436.
Pseudococcus sphagni, sp. n., in nests of *Formica picea* in Britain, III. 754.
Pseudococcus virgatus (*bicaudatus*, *marchali*), on cotton in Africa, II. 1; on *Tephrosia candida* in Ceylon, III. 83; on egg-plant in E. Africa, II. 417; on tobacco in Hawaii, II. 630; bionomics of, in Java, III. 646, 648, 663; ants associated with, in the Seychelles, II. 567; on *Xymenia americana* in W. Africa, I. 14.
Pseudococcus virgatus, var. *madagascariensis*, on cacao in S. Nigeria, II. 107, 203, III. 165, 663.
Pseudococcus (*Dactylopius*) *vitis*, measures against, on vines in France, II. 609; on vines in Germany, II. 632; on vines in Italy, III. 113; control of, on vines in Russia, II. 354, 428, III. 602; in Tunis, II. 229.
Pseudococcus yerba-santae, bionomics of, in California, I. 307, II. 436, 437.
Pseudocreobotra wahlbergi, predaceous on Aphids in Uganda, II. 59.
Pseudodoryotes camerunus, from Lagos, II. 346.
Pseudohazis eglanterina (Brown Day Moth), bionomics of, in California, II. 439, 599, III. 419.
Pseudokermes cooleyi, sp. n., on *Picea engelmanni* in Montana, II. 386.
pseudoleae, *Neolecanium*.
pseudomagnoliarum, *Eulecanium* (*Lecanium*).
pseudomorpha, *Dinaspis*.
pseudonipae, *Pseudococcus*.
Pseudoparlatoria chilina, in Chile, I. 138.
Pseudo-sago Palm (see *Cycas officinalis*).
Pseudotrimerotropis (*Trimerotropis*) *vinculata*, in Oregon, III. 263.
Pseudotsuga mucronata, pests of, in Br. Columbia, III. 3.
Pseudotsuga taxifolia (Douglas Fir), pests of, in Canada and U.S.A., I. 297, 407, III. 248, 350, 557, 588, 669-671.
pseudotsugae, *Dendroctonus*.
psi, *Acronycta*.
psidii, *Pulvinaria* (*Lecanium*).
Psidium cattleyanum, *Ceratitis capitata* on, in Hawaii, III. 412.
Psidium guayava (see Guava).
Psila rosae (Carrot Rust Fly), in Canada, III. 69, 551; on carrots in Denmark, III, 247, 699; food-plants of, in France, I. 335, II. 420; on carrots in Russia, I. 463; potassium permanganate against, in Holland, III. 200; on celery roots in Ireland, II. 8; on carrots in Norway, III. 107.
Psilocephala, predaceous on *Heristonotus uhleri* in S. Carolina, III. 693.
Psilocephala aldrichi, destroying wireworms in U.S.A., III. 300.
Psilocephala munda, destroying wire-worms in U.S.A., III. 300.
Psilura monacha (see *Lymantria*).

Psophus stridulus, in Russia, III. 482.
Psoralea argophylla (Scurvy Pea), *Cantharis* spp. on, in Canada, III. 507.
Psyche helix (see *Apterona crenulilla*).
Psyche unicolor (see *Pachytalia*).
Psychonoctua, food-plants of, in Porto Rico, I. 389.
Psylla, on kola in the Gold Coast, II. 672; in Russia, II. 198, 334, 367, III. 118; control of, in Russia, III. 101, 700; natural enemies of, in Russia, II. 370; effect of lime-wash on eggs of, III. 286.
Psylla albipes, in the Crimea, II. 334.
Psylla alni, on alder in Norway, III. 697.
Psylla buxi, on box in U.S.A., III. 709; on box in Holland, III. 743.
Psylla diospyri, on persimmon in U.S.A., III. 709.
Psylla ficus, on figs in France, III. 11.
Psylla groenlandica, sp. n., in Greenland, II. 125.
Psylla hexastigma, on pears in E. Siberia and Japan, II. 125.
Psylla horvathi, sp. n., in the Crimea, II. 334; in Hungary, II. 125.
Psylla isitis, bionomics of, on indigo in India, I. 43-46, II. 687.
Psylla mali (Apple Psylla), bionomics and control of, in Britain, II. 8, 628, III. 278, 280-282; carbolineum against, in Holland, III. 743; bionomics and control of, in Russia, I. 206, 209, 362, 371, 492, 496, II. 35, 198, 258, 264, 319, 366, 367, 442, 463, 496, 515, 615, III. 20, 107, 120, 139, 152, 204, 214, 224, 226, 235, 310, 393, 401, 440, 540, 606, 608, 700.
Psylla melanoneura, on pears in the Crimea, II. 334.
Psylla pyrarboris, in the Crimea, II. 334.
Psylla pyri (Pear Psylla), bionomics and control of, in orchards in Russia, I. 357, 361, 362, II. 43, 259, 330, 366, 374, 422, 463, III. 393, 401; in orchards in U.S.A., I. 127, II. 673; III. 86, 373.
Psylla pyricola (Pear Psylla), in Canada, II. 492, III. 552; bionomics of, in England, III. 281; on pears in France, II. 539; bionomics and control of, in orchards in Russia, I. 488, 496, 536, II. 35, 44, 442, 700, 715, III. 41, 45, 172, 214, 223, 224, 226, 399, 606; on pears in U.S.A., I. 282, 467, II. 529, III. 473.
Psylla pyrisuga, on pears in the Crimea, II. 334, III. 613; carbolineum used against, in Holland, III. 743; on apple in Norway, III. 107.
Psyllaephagus, parasite of *Aspidiotus perniciosus* in U.S.A., III. 473.
Psyllidae, of the New World, monograph of, II. 601.
Psylliodes, on vines in Russia, III. 47, 543.
Psylliodes affinis, in Ireland, II. 8.
Psylliodes attenuata, on hops in Bohemia, I. 245; on hemp, hops, etc., in Russia, II. 34, III. 222, 481, 606; distribution of, I. 342.
Psylliodes breviuscula, on hemp and beet in Russia, II. 34.
Psylliodes chrysocephala, on turnips in Denmark, III. 699; on radishes, etc., in France, I. 257, 504, III. 428; on turnips in Germany, II. 500, 501; on rape, mustard, etc., in Russia, I. 396, II. 497, III. 481.
Psylliodes deyrollei, on apple and pear in Astrachan, III. 222.
Psylliodes luteola, food-plants of, in Russia, III. 639.
Psylliodes picina, food-plants of, in Russia, II. 342, III. 639.
Psylliodes punctulata, in Austria, I. 245, 342; on hops, etc., in Canada, I. 87, 299.
Psyllobora, predaceous on *Hemichionaspis minor* in Peru, I. 323.
Psyllobora taedata, in Oregon, I. 511; predaceous on mites in California, II. 553.
Psyllodontus secundus, sp. n., parasite of Psyllids in Ceylon, III. 724.
Psyllopa punctipennis (see *Psylla isitis*).
Ptelea trifoliata (Hop-tree), *Enchenopa binotata* on, in U.S.A., III. 572.
pteridis, *Macrosiphum*.
Pteris, *Aphelencus olesistus* on, in Russia, II. 424.
Pteris aquilina, *Macrosiphum pteridis* on, in Oregon, III. 588.
Pterocarpus indicus (Padauk), pests of, in India, III. 723.
Pterochlorus roboris, on oak in Russia, III. 45.
Pterocomma pilosa, on willow in England, III. 660.
Pteromalus, parasites of *Parerynnia ribrissata* in France, I. 315; liberated in Hawaii, III. 412; parasites of Lepidoptera in Russia, I. 347, 363, II. 369; parasites of *Agromyza pusilla*, in U.S.A.,

II. 46; parasites of *Aphis rumicis* (*euonymi*), II. 620; parasites of *Lasioderma sericorne*, II. 630; parasites of *Rhynchites pauxillus* in Russia, III. 533.
Pteromalus bimaculatus, parasite of *Xyleborus xylographus* (*saxeseni*) in Germany, II. 486; parasite of *Apate*, II. 196.
Pteromalus (*Trichomalus*) *cristatus*, parasite of *Oscinella frit* in Russia, I. 214, II. 371, III. 47.
Pteromalus daplidice, parasite of *Pieris daplidice* in Russia, II. 356.
Pteromalus egregius, parasite of *Euproctis chrysorrhoea* and *Hyphantria cunea* in N. America, I. 142, 270, 402, II. 343, 394.
Pteromalus einersbergensis, II. 473.
Pteromalus eurymi, parasite of *Colias eurytheme* in U.S.A., III. 153.
Pteromalus flavipes, parasite of *Agrilus hastifer* in Russia, III. 228.
Pteromalus hylotoma, parasite of *Hylotoma rosae* in France, I. 335.
Pteromalus laricinellae, parasite of *Coleophora laricella*, I. 63.
Pteromalus pallipes, parasite of *Mayetiola destructor* in U.S.A., I. 528, II. 225.
Pteromalus puparum, parasite of *Pieris* spp., I. 142, 537, II. 356, 665, III. 46, 637.
Pteromalus vitis (see *Eucomys swederi*).
Pteronidea winnanae, sp. n., on *Salix* in U.S.A., III. 658.
Pteronus consobrinus (see *P. leucotrochus*).
Pteronus hortensis, on *Robinia pseudacacia* in Russia, I. 488.
Pteronus leucotrochus, on gooseberries in France, II. 622.
Pteronus ribesii (Currant and Gooseberry Sawfly), bionomics of, on gooseberry in Britain, II. 563, III. 74, 97, 502, 715; on currants and gooseberries in Canada, I. 406, II. 512, III. 69, 552; bionomics of, in France, II. 621, 622; bionomics of, in Germany, II. 590; on roses, etc., in Holland, I. 386, III. 743; bionomics and control of, in Russia, I. 206, 208, 493, II. 36, 341, 370, 442, III. 74, 108, 204, 222, 224, 392, 481, 606, 610, 640, 642; in U.S.A., I. 276, 476, III. 181, 515; not attacking black currants, III. 204.
Pteronus (*Nematus*) *salicis*, on willows in Russia, I 494, 499, II. 442, III. 401.
Pteronus ventricosus (see *P. ribesii*).
Pteronycta fasciata, on cotton in Nyasaland, II. 277.
Pterophorus galactodactylus (see *Alucita*).
Pteroptrix, I. 549.
Pterostichus (*Platysma*) *cupreus*, caught in trenches in Russia, III. 138.
Pterostichus melas, predaceous on *Bothynoderes punctiventris* in Russia, II. 179.
Pterostichus oblongopunctatus, predaceous on *Hylobius abietis* in Germany, II. 326.
Pterostichus (*Feronia*) *vulgaris*, imported into U.S.A. on plants from Holland, III. 354.
Ptilinus pectinicornis, in Sweden, III. 255; in furniture in Britain, III. 677.
Ptinus fur, damaging grain in Russia, II. 40.
Ptinus tectus, infesting chocolate and cayenne pepper in England, III. 277; damaging biscuits, I. 292.
Ptychomyia selecta, parasite of sawflies in Russia, III. 640.
Ptyelus grossus, on pigeon-peas in Nigeria, III. 166.
puberula, Agonoscelis.
pubescens, Glyptoscelis; Hoplia; Ophonus (*Harpalus*); *Tomaspis.*
pubicollis, Hoplia (see *H. pubescens*).
pudibunda, Dasychira.
pudibundae, Pimpla.
Pueraria thunbergiana, food-plant of *Aulacaspis pentagona*, I. 222; *A. pentagona* intercepted on, in California, III. 558.
puerperis, Thiodina.
pugionata, Dicerca.
pulchellus, Julus; Prochiloneurus.
pulcher, Tenuipalpus.
pulchripennis, Biphymaphorus; Exypnus.
pulchrum, Eurydema.
pulicarius, Rhamphus.
pullata, Fidicina; Gnophos; Zenillia.
pullicomella, Aphelosetia.
Pullus fuscatus, predaceous on *Pseudococcus* in the Phillipines, II. 243.
Pullus (*Scymnus*) *haemorrhoidalis*, predaceous on *Phylloxera* in Sicily, III. 405.
pullus, Chlamydatus; Zygothrips.
Pulse, pests of, in India, I. 344, II. 69, III. 157.
Pulvinaria, on cotton in E. Africa, I. 246, II. 581; on sugar-cane in Br. Guiana, I. 522, II. 417; on *Funtumia elastica* in Ceylon, II. 192; *Microperrisia pulvinariae* parasite of, in Manila, III. 725.

Pulvinaria acericola, on maple in U.S.A., III. **709**; parasitised by *Leucopis nigricornis*, I. **392**.
Pulvinaria antigoni, ants associated with, in the Seychelles, II. **567**.
Pulvinaria aurantii, on fruit in Japan, I. **520**.
Pulvinaria burkilli, on *Croton tiglium* in Ceylon, II. **644**.
Pulvinaria camelicola, parasitised by *Leucopis nigricornis* in Italy, I. **392**.
Pulvinaria citricola, sp. n., on citrus, etc., in Japan, III. **127**.
Pulvinaria contexta, on *Bossiaea* in Australia, III. **503**.
Pulvinaria darwiniensis, on *Calladium* in Australia, III. **503**.
Pulvinaria dichrostachys, on *Dichrostachys nutans* in E. Africa, II. **346**.
Pulvinaria floccifera, food-plants of, in Australia, III. **503**.
Pulvinaria gasteralpha (see *P. iceryi*).
Pulvinaria greeni, on *Myoporum deserti* in Australia, III. **503**.
Pulvinaria iceryi, on sugar-cane in Mauritius, III. **160**.
Pulvinaria idesiae, sp. n., on *Idesia polycarpa* and *Phellodendron amurense* in Japan, III. **127**.
Pulvinaria innumerabilis (Cottony Maple Scale), declared a pest in Br. Columbia, I. **48**; bionomics of, in U.S.A., II. **680**, III. **162**, **531**.
Pulvinaria jacksoni, on cotton in Nyasaland, II. **278**; on cotton in Nigeria, II. **106**, III. **164**; on cotton, etc., in Uganda and E. Africa, I. **49**, II. **59**, **414**.
Pulvinaria maskelli, food-plants of, in Australia, III. **503**.
Pulvinaria maskelli, var. *novemarticulata*, nov., on *Hymenanthera dentata* in Australia, III. **548**.
Pulvinaria nuytsiae, on *Nuytsia florabunda* in Australia, III. **503**.
Pulvinaria okitsuensis, sp. n., on orange in Japan, III. **127**.
Pulvinaria photiniae, sp. n., on *Photinia villosa* and *Celtis sinensis* in Japan, III. **127**.
Pulvinaria psidii, on *Schinus terebinthifolia* in Algeria, III, **173**; on tobacco in Hawaii. II. **630**; on coffee and rubber in Java, III. **646**, **714**; ants associated with, in Seychelles, II. **567**; on coffee and *Funtumia* in E. Africa and Uganda, I. **49**, II. **59**, **447**, **591**, **592**; in U.S.A., I. **265**.
Pulvinaria pyriformis, on avocado in Br. Guiana, II. **417**.
Pulvinaria tecta, food-plants of, in Australia, III. **503**.
Pulvinaria theae, on *Thea viridis* in Australia, III. **503**.
Pulvinaria vitis, food-plants of, in Britain, III. **754**; parasitised by *Microterys flavus* in California, I. **309**; control of, on vines in France, II. **609**; on vines in Italy, III. **113**; on vines in the Palatinate, II. **539**; on vines in U.S.A., I. **141**, II. **184**, III. **709**.
Pulvinaria vitis var. *ribesiae* (White Woolly Currant Scale), on currants in Britain. I. **433**.
pulvinariae, Microperrisia.
pulvinatus, Chorthippus (*Stenobothrus*).
pulvini, Rhabdophaga.
pumila, Hyperaspis.
pumilus, Microdus.
Pumpkins, not attacked by *Phlyctaenodes sticticalis* in Astrachan, III. **700**; pests of, in Hawaii, III. **29**, **163**; *Apomecyna binubila* on, in Natal, III. **60**; pests of, in Queensland, I. **192**, II. **18**; pests of, in Russia, I. **493**, II. **34**, **312**, III. **21**, **45**, **702**; pests of, in Canada and U.S.A., I. **241**, **299**, **430**, **517**, II. **83**, **120**, **435**, **456**, III. **510**; (see also Squash).
Pumpkin Bug (see *Nezara hilaris*).
Pumpkin Fly (see *Dacus cucurbitae*).
Pumpkin Stem Borer (see *Apomecyna binubila*).
punctata, Ceratitis; *Coccinella*; *Conchyloctenia*; *Hypera*; *Neurotoma* (see *N. nemoralis*); *Scolia*; *Xanthopimpla.*
punctatifrons, Dacus (*Tridacus*).
punctatissimus, Corthylus.
punctatus, Broscus; *Pentodon*; *Phylax* (*Dendarus*); *Poecilus*; *Sticholotus*; *Symphyothrips.*
puncticollis, Cylas; *Isodon*; *Nodonta*; *Odontria*; *Phloeotribus*; *Schizonycha*; *Syagrus.*
punctifer, Duomitus.
punctiferalis, Astura; *Dichocrocis.*
punctiger, Habrocryptus; *Habrocytus.*
punctillus, Scymnus.
punctipennis, Amphicerus; *Erythrobata*; *Psyllopa* (see *Psylla isitis*).
punctiventris, Bothynoderes (*Cleonus*); *Derostenus.*
punctolineatus, Melanotus.
punctulata, Dicerca; *Psylliodes.*
punctulifera, Saissetia (*Lecanium*).
punctum-album, Macrophya.
punctum, Cratopus; *Stethorus.*
Pundaluoya simplicia (see *Peregrinus maidis*).

Punica granatum (see Pomegranate).
punicella, Aphis.
puparum, Pteromalus.
purchasi, Icerya.
purcipera, Delphax.
purgatus, Henicospilus (*Ophion*).
Purple Apple Aphis (see *Aphis sorbi*).
Purple Scale (see *Lepidosaphes beckii*).
purpurascens, Phassus.
purpurea australis, Antonina.
purpureipennis, Carpocoris.
purpureus, Sympiesis.
Purpuricenus, in oak in Russia, III. 544.
Purpuricenus koehleri, on peaches in Germany, I. 149; trapped in vineyards in Italy, II. 680.
Purpuricenus koehleri var. *aetnensis*, on vines in Italy, III. 112.
purpuriferum, Acridium (see *Cyrtacanthacris septemfasciata*).
Purslane, *Arctia caja* on, in France, I. 274.
Purslane Hawk-moth (see *Deilephila lineata*).
pusiella, Ethmia (*Psecadia*).
pusilla, Agromyza; *Blennocampa*; *Chrysobothris*; *Oscinis* (see *Oscinella frit* var. *pusilla*); *Phyllotreta.*
pusillidactyla, Platyptilia.
pusillum, Gonocephalum (*Opatrum*); *Trombidium.*
pusillus, Laemophloeus.
pusio, Calliephialtes (see *C. messor*).
pustulans, Asterolecanium.
Pustular Oak Scale (see *Asterolecanium variolosum*).
pustulata, Scobicia; *Strachia* (see *Eurydema festivum* var. *decoratum*).
pustulosus, Phloeobius.
putaminana, Cydia (*Carpocapsa*).
putator, Oncideres.
Putnam's Scale (see *Aspidiotus ancylus*).
putnami, Platypedia.
putorius, Rhinotermes.
Pycnoderes quadrimaculatus, on Cucurbitaceae in Arizona, I. 179, 180.
Pycnonotus layardi, destroying *Anaphe* in Africa, II. 548.
Pygaera anachoreta, in Russia, III. 400.
Pygaera curtula, in Russia, III. 400.
pygarga, Anthrax.
pygmaea, Leptispa.
pygmaeana, Tortrix (*Asthenia*).
pygmaeus, Cephus; *Coccotrypes*; *Pimelopus.*
Pygostolus sticticus, parasite of *Pteronus ribesii* in France, II. 622.
pylades, Solenopsis.
Pyinkadu tree, *Catoxantha bicolor* on, in Burma, III. 661.
Pyralis of the Vine (see *Sparganothis pilleriana*).
Pyralis (*Asopia*) *farinalis* (Meal Snout Moth), II. 330; in Astrachan, III. 220; preventive measures against, I. 114, III. 175; damaging stored cereals in U.S.A., II. 93; in New Zealand, I. 344; infesting biscuits, I. 330; not damaging biscuits, I. 293.
Pyralis mauritialis, parasitised by *Hockeria* in Hawaii, III. 681.
Pyralis pictalis, in rice in Far East, II. 489.
pyralis, Sacadodes.
Pyrameis, experiments with flacherie in, II. 528.
Pyrameis (*Vanessa*) *cardui* (Painted Lady, Thistle Butterfly), on thistles, etc., in Canada, and U.S.A., I. 84, II. 663, III. 262; on artichokes in France, I. 339, 410, 420, II. 302, 450, 606; Hymenopterous parasites of, in Russia, III. 401; experiments with *Chaetogaedia monticola* and, III. 711; infested by *Bacillus pyrameis*, I. 552.
pyramidea, Amphipyra.
pyrarboris, Psylla.
pyrarius, Myzus.
pyrastri, Lasiophthicus (*Catabomba, Syrphus*).
Pyrausta coclesalis, on sugar-cane in Far East, I. 170, II. 490.
Pyrausta (*Botys*) *margaritalis*, on radishes in France, I. 257.
Pyrausta nubilalis (*Botys silacealis*), on maize in Egypt, I. 501; bionomics of, on maize in France, I. 409, II. 420; on millet in Portugal, I. 313; on maize, etc., in Russia, I. 496, 530, II. 43, 171, 442, 515, III. 52, 205, 341, 397, 403, 487, 540, 543, 600, 606.
Pyrausta quadripunctalis, on maize in Russia, II. 515.
Pyrausta vastatrix, on maize in Philippines, I. 157.
Pyrethrum, cultivation of, as an insecticide, I. 247, III. 735.
Pyrethrum cinerariaefolium, cultivation of, I. 230, 247.
Pyrethrum Powder, as an insecticide I. 72, 247, 315, II. 285, 309, 387, 396, 410, 644, 677, III. 7, 554, 732; useless against Argentine ants, I. 326.

Pyrgodera armata, in Astrachan, II. **717**; in Siberia, III. **537**; distribution of, in Russia, III. **636**.
Pyrgota undata, parasite of *Lachnosterna* and *Galerucella luteola* in U.S.A., I. **528**, II. **121**.
pyri, Aphis; *Epitrimerus*; *Eriophyes* (*Phytoptus*); *Eriosoma* (*Schizoneura*); *Eulecanium* (*Lecanium*); *Lophyrus*; *Lyda* (see *Neurotoma flaviventris*); *Perrisia*; *Phyllobius*; *Psylla*; *Saturnia*; *Taeniothrips* (*Euthrips*); *Tingis*.
pyricola, Clinodiplosis (*Cecidomyia*); *Psylla*.
Pyridine, against vine pests, I. **338**, II. **411**, **482**, **685**, III. **211**, **284**; ineffective against *Aphis rumicis*, III. **526**.
pyriformis, Lepidosaphes; *Pemphigus*; *Pulvinaria*.
Pyrilla, parasitised by *Pyrilloxenos compactus* in India, III. **17**.
Pyrilla aberrans, in India, III. **145**.
Pyrilloxenos compactus, sp. n., parasite of *Pyrilla* in India, III. **17**.
pyrina, Zeuzera.
pyrinus, Myzus.
pyrisuga, Psylla.
pyrivora, Contarinia (*Cecidomyia, Diplosis*).
Pyroderces gossypiella (see *P. simplex*).
Pyroderces simplex (Cotton-seed Caterpillar), on cotton in Africa, I. **414**, II, **2**, **283**,**580**; on maize in Egypt, I. **501**; on cotton in Nigeria, III. **164**; parasites of, III. **164**, **168**.
Pyrol Moth, Woolly (see *Anticarsia gemmatalis*).
Pyrophorus luminosus, predaceous on *Lachnosterna* in Porto Rico, II. **48**, III. **299**.
Pyrox, as an insecticide, III. **192**, **514**.
Pyrrhia umbra, on roses in Ontario, II. **491**.
Pyrrhocoris apterus, in Russia, I. **449**, III. **7**.
pyrrhogaster, Micromelus.
Pyrus, list of Aphids on, in Russia, II. **79**; *Aphis avenae* on, in U.S.A., II. **696**.
Pyrus americana (North American Mountain Ash), Aphids on, in Maine, I. **25**, III. **423**.
Pyrus aria (White Beam), *Eriophyes pyri* on, in America, III. **362**; *E. pyri* on, in Scotland, II. **498**.
Pyrus aucuparia (see Ash, Mountain).
Pyrus cerasiformis, Hoplocampa testudinea on, in Russia, III. **225**.
Pyrus communis (see Pear).
Pyrus malus (see Apple).
Pyrus sinensis (Oriental Pear), pests of, in U.S.A., I. **467**.
Pyrus sitchensis, Eriosoma lanigerum on, in Maine, III. **423**.
Pyrus sorbus (see Service Tree).
Pyrus torminalis (Wild Service Tree), *Eriophyes pyri* on, in Scotland, II. **498**.
pyste, Exorista.
Pytho depressus, in France, III. **694**.
pythonius, Hemarchus (*Phibalosoma*).

Q.

quadratus, Stenocranophilus.
quadricollis, Cathartus.
quadridens, Ceuthorrhynchus; *Pityogenes*.
quadrifasciata, Cerceris.
quadrifrons, Armadillidium.
quadrigibbus, Anthonomus.
quadrilineatus, Ceroplastes; *Cleonus*.
quadrimaculata, Eburia; *Libellula*; *Temnoschoita*.
quadrimaculatus, Bruchus; *Exochomus*; *Monochamus*; *Pycnoderes*.
quadrinotata, Arbela.
quadripes, Xylotrechus.
quadripuncta, Anthaxia (*Buprestis*).
quadripunctalis, Pyrausta.
quadripunctata, Caradrina (see *Athetis clavipalpis*); *Chrysopa*; *Phaneroptera*; *Scolia*.
quadripunctatus, Oecanthus.
quadripustulata, Winthemia.
quadrispinosus, Scolytus (*Eccoptogaster*).
quadrituber, Horonotus.
Quails, destroying insects, I. **42**, **68**, **305**, **518**, II. **227**, **469**, **525**, III. **297**.
quaintancei, Telenomus.
Quassia, formulae for making insecticides containing, I. **78**, **209**, **242**, **246**, **471**, **492**, II. **615**, **701**, III. **204**, **254**, **604**, **641**, **651**; and soft soap, cost of, II. **358**; extract of, prepared from *Quassia amara*, II. **719**; methods of extracting, III. **204**; extract of, prepared from *Lignum quassi-surinamensis*, III. **604**.
Quassia amara, extract prepared from, II. **719**.
Quassia Soap, preparation of, from *Picroena excelsa*, III. **204**, **651**.
Quassiin, method of extracting, III. **187**.

Quassine, as an insecticide, III. 104.
quatuordecimpunctata, Coccinella (*Halyzia*); *Crioceris*; *Mylabris* (*Zonabris*); *Propylaea.*
quatuordentatum, Lioderma.
quatuormaculatus, Alurnus; *Tetraonyx.*
quatuornotatus, Oxybelus.
quatuorpunctata, Mylabris (*Zonabris*).
quatuorpustulata, Brachymena.
quatuorpustulatus, Exochomus.
quaylei, Aphelinus.
Quebec, I. 140, 231, 298; insect pests of, I. 301, 379, 403, 404, 406, II. 25, 94, 664, III. 18, 68, 72, 149, 368, 369, 552, 584; plant protection legislation in, II. 207, III. 9; bacterial diseases of *Malacosoma americana* in, III. 584.
Queensland, methods of controlling ants in, III. 365; pests of bananas in, II. 511; legislation against *Ceratitis capitata* in, III. 582; new Chalcidoid Hymenoptera from, III. 26, 256, 357; fruit pests in, II. 20, 116, 152, 584; attempt to control prickly pear by means of insects in, III. 125; *Promecotheca callosa* on coconut in, III. 27; pests of sugar-cane and their control in, II. 17, 171, 690, III. 289, 364, 409, 490, 560, 707, 718, 751; pests of vegetables, etc., in, I. 192, II. 18, III. 6, 289.
Queensland Coconut Hispid (see *Promecotheca callosa*).
Queensland Fruit-fly (see *Dacus ferrugineus*).
quercata, Anthaxia.
quercella, Talis.
quercetorum, Haltica.
querci, Lepturges; *Phyllaphis.*
quercicola, Asterolecanium (*Coccus*).
quercifex, Eulecanium (*Lecanium*).
quercifolia, Gastropacha.
quercifoliae, Phyllaphis.
quercinaria, Ennomos.
quercivora, Dimorphopteryx.
Quercus (see Oak).
Quercus agrifolia (Coast Live Oak), pests of, in California, II. 115, 251, 435, 438.
Quercus alba (White Oak), pests of, in France, II. 422; pests of, in U.S.A., II. 600, 711. III. 15, 331.
Quercus arizonica, Neoclytis capraca on, in U.S.A., III. 658.
Quercus chrysolepis (Californian Live Oak), scale-insects on, in California, II. 245, 436, 553.
Quercus coccifera, Lymantria dispar on, in France, II. 422.
Quercus coccinea (Scarlet Oak), pests of, in U.S.A., II. 600, III. 331.
Quercus garryana, Malacosoma constricta on, in Oregon, I. 130.
Quercus lobata, pests of, in California, II. 251, III. 150.
Quercus macrocarpa, Agrilus bilineatus on, in U.S.A., III. 331, 733.
Quercus marilandica, Oecanthus exclamationis on, in New York, III. 733.
Quercus nigra (Water Oak), *Eulecanium quercifex* on, in U.S.A., II. 600.
Quercus palustris, Ectoedemia heinrichi on, in U.S.A., III. 248.
Quercus pedunculata var. *praecox*, pests of, in Russia, III. 437.
Quercus pedunculata var. *tardiflora*, pests of, in Russia, III. 438.
Quercus phellos (Willow Oak), *Eulecanium quercifex* on, in U.S.A., II. 600.
Quercus prinus, Eriocampoides on, in U.S.A., III. 658.
Quercus robur, Myzocallis quercus on, in California, II. 251.
Quercus rubra (Red Oak), pests of, in U.S.A., II. 600, III. 331, 418, 658.
Quercus serrata, Xylococcus napiformis on, in Japan, III. 127.
Quercus suber (see Cork Oak).
Quercus velutina (Black Oak), pests of, in U.S.A., I. 384, II. 600, III. 15; resistant to gipsy moth, II. 711.
Quercus virginiana (Live Oak), *Eulecanium quercifex* on, in U.S.A., II. 600.
quercus, Chionaspis; *Lasiocampa*; *Myzocallis*; *Phylloxera*; *Platycerus*; *Rhynchaenus* (*Orchestes*).
quercusbaccarum, Neuropterus.
quercus-folii, Diplolepis.
Quillaia saponaria (Panama Wood), decoction of, as an adhesive, II. 411, 556.
Quince (*Cydonia vulgaris*), fruit-flies on, in S. Africa, I. 196; regulations regarding removal of, in S. Africa, II. 84; pests of, in Australia, II. 493; pests of, in Russia, I. 79, 368, 460, 536, 539, II. 79, 419, 636, III. 43, 45, 49, 219; pests of, in U.S.A., II. 390, 493, 553, III. 52, 258, 261, 414, 586, 687.
Quince, Japanese (see *Cydonia japonica*).
Quince Curculio (see *Conotrachelus crataegi*).

quinquedecimpunctata, Anatis.
quinquemaculata, Protoparce (*Phlegethontius*).
quinquenychus, Tenuipalpus.
quinquepunctata, Coccinella; *Crioceris.*
quinquespinatus, Diapus.
quinquevittata, Disonycha.
Quinoline, as an insecticide, III. 284.
Quiscalus fortirostris, destroying *Erinnyis ello* in Barbados, II. 533.
Quiscalus quiscula, destroying insects in Kentucky, I. 54.
quisquilius, Crypticus.
Quivisia heterophylla, Ceroplastes vinsoni on, in Réunion, II. 216.

R.

Racoon, destroying *Calosoma sycophanta* in U.S.A., III. 717.
radicans, Aphis.
radicicola, Heterodera.
radicum, Anthomyia; *Aphis.*
Radish (*Raphanus sativus*), *Athalia* on, in E. Africa, I. 246; *Contarinia nasturtii* on, in Britain, III. 500; pests of, in Canada and U.S.A., I. 324, 400, II. 160, 664, III. 149, 266, 471, 507, 551, 565, 569, 687; pests of, in France, I. 257, III. 1; *Hellula undalis* on, in Guam, III. 373; *Plutella maculipennis* on, in Hawaii, III. 363; *Pieris monuste* on, in Porto Rico, III. 477; *Phytometra orichalcea* on, in Rhodesia, III. 361; pests of, in Russia, I. 211, 212, 536, II. 52, 254, 357, III. 221; not attacked by *Tetranychus telarius*, III. 64.
Radish Aphis (see *Aphis brassicae*).
Radish Weevil (see *Cleonus sparsus*).
Ragi, pests of, in India, II. 68, 138, III. 145.
Ragmus importunitas, on *Crotalaria* in Ceylon, III. 83.
Railroad Worm (see *Rhagoletis pomonella*).
rama, Callicratides.
Ramona polystachya (White Sage), *Pseudococcus crawii* on, in California, II. 435.
ramosa, Phyllotreta; *Silpha.*
Rampassen, name for method of controlling *Acrocercops cramerella* in Java, I. 57–62.
ramulorum, Myrmelachista ambigua.
Ranatra, immune to *Coccobacillus cajae*, I. 167.
Range Caterpillar, controlled by *Calosoma* in U.S.A., III. 553.
Rangoria (*Brachyglottis repanda*), *Deilemera annulata* on, in New Zealand, III. 721.
Ranunculus, Aphis crataegi on, II. 80; *Thecabius populiconduplifolius* on, in Colorado, III. 351.
rapae, Aphidius (*Diaeretus*); *Ceuthorrhynchus*; *Cothonaspis* (*Eucoila*); *Pieris* (*Pontia*).
Rapala schistacea, on tea in Ceylon, III. 157.
rapax, Aspidiotus (see *A. camelliae*).
Rape (*Brassica rapa*), *Macrosiphum lycopersicella* on, in E. Africa, II. 276; *Contarinia nasturtii* on, in Britain, III. 500; *Meligethes aeneus* on, in Germany, II. 501; *Phytometra orichalcea* on, in Rhodesia, III. 361; pests of, in Russia, I. 395, 532, II. 43, 497, 648, III. 41, 50, 67, 112, 227, 397, 443, 481, 483; *Chortophila brassicae* on, in U.S.A., II. 160.
Rape-seed, Oil of, against *Eriosoma lanigerum*, II. 246.
raphanistri, Perrisia (*Dasyneura*).
Raphanus raphanistrum (Wild Radish), *Contarinia nasturtii* on, in Britain, III. 500.
Raphanus sativus (see Radish).
rapidus, Adelphocoris.
raptor, muscidivorax (*vorax* in error).
Rascally Leaf Crumpler (see *Phycis indiginella*).
Raspberry (*Rubus idaeus*), pests of, in Britain, I. 236, 388, II. 563, III. 547, 676; pests of, in Canada, I. 93, 401, 405, 406, III. 69; pests of, in France, II. 16, 230, 621; *Incurvaria rubiella* on, in Germany, III. 582; *Phyllobius calcaratus* on, in Holland, I. 385; pests of, in Russia, I. 206, 207, 208, II. 36, 82, 342, 337, 368, 370, 480, III. 45, 46, 106, 119, 223, 235, 311, 440, 441, 540, 543, 601; pests of, in Sweden, III. 253; *Byturus fumatus* on, in Switzerland, I. 345; pests of, in U.S.A., I. 140, 276, 425, II. 116, 188, 390, 439, 674, III. 52, 181, 270, 419, 422, 424, 457, 733; not attacked by *Lymantria dispar* in U.S.A., III. 669; varieties of, most subject to insect attack, III. 441.
Raspberry Beetle (see *Byturus tomentosus*).
Raspberry-cane Borer (see *Aegeria tipuliformis* and *Oberea bimaculata*).
Raspberry-cane Maggot (see *Phorbia rubivora*).

Raspberry Gout-gall Beetle (see *Agrilus ruficollis*).
Raspberry Horntail (see *Hartigia cressoni*).
Raspberry Moth (see *Incurvaria rubiella*).
Raspberry-root Borer (see *Aegeria marginata*).
Raspberry Sawfly (see *Monophadnus rubi*).
Raspberry Weevil (see *Otiorrhynchus picipes*).
ratzeburgi, Scolytus (*Eccoptogaster*); *Palorus*.
raucus, Otiorrhynchus.
Raven, destroying insects, II. **147, 509.**
ravida, Agrotis.
ravidus, Epicaerus.
Ravinia communis, III. **452.**
Ravinia peniculata, III. **452.**
Ravinia trivialis, causing intestinal myiasis, III. **452.**
reaumuri, Pachypappa.
Recaredus (Potato Tingid), control of, on stored potatoes in India, III. **145, 321.**
reclusa, Elydna (*Caradrina*).
recta, Thosea.
rectangularis, Eutermes; *Lacon*.
rectangulata, Chloroclystis.
rectirostris, Anthonomus.
recurva, Phoracantha.
recurvalis, Hymenia.
Recurvaria crataegella (see *R. nanella*).
Recurvaria leucatella, on apple in Russia, II. **341.**
Recurvaria milleri, sp. n., on *Pinus murrayana* in U.S.A., III. **248.**
Recurvaria (*Gelechia*) *nanella* (Lesser Bud Moth), bionomics of, on apple in U.S.A., II. **574,** III. **139–141**; on fruit trees in Russia, II. **342, 714,** III. **214, 613.**
Recurvaria piceaella, on spruce in U.S.A., I. **141, 200.**
recurvariae, Phanerotoma.
Red-backed Cutworm (see *Euxoa ochrogaster*).
Red-banded Thrips (see *Heliothrips rubrocinctus*).
Red Boll-worm (see *Diparopsis castanea*).
Red Borer of Coffee (see *Zeuzera coffeae*).
Red-footed Weevil (see *Otiorrhynchus picipes*).
Red Fungus (see *Aschersonia aleurodis*).
Red-headed Ant (see *Cremastogaster scutellaris*).
Red-headed Flea-Beetle (see *Systena frontalis*).
Red-headed Fungus (see *Sphacrostilbe coccophila*).
Red-humped Apple Caterpillar (see *Schizura concinna*).
Red Locust (see *Cyrtacanthacris septemfasciata*).
Red Mangrove (*Heritiera littoralis*), weevil imported on, into U.S.A., II. **460.**
Red Muscardine Fungus (see *Sorosporella uvella*).
Red-necked Apple Caterpillar (see *Datana ministra*).
Red Oil, formulae for mixture of, II. **110, 603.**
Red Pepper (see *Capsicum annuum*).
Red Scale (see *Chrysomphalus aurantii*).
Red Slug of Tea (see *Heterusia cingala*).
Red Spider (see *Tetranychus* and *Bryobia*).
Red-spotted Scale (see *Chrysomphalus aonidum*).
Red-tail (see *Dasychira pudibunda*).
Red Turnip Beetle (see *Entomoscelis adonidis*).
Red Wax Scale (see *Ceroplastes rubens*).
redemanni, Termes.
redenianus, Termes.
Redstart, protection of, in vineyards, I. **479.**
Redtop Grass, False (*Triplasis purpurea*), *Blissus leucoptera* on, in U.S.A., II. **227.**
Reduviolus ferus (see *Nabis*).
Reduviolus roseipennis, parasitised by *Leucostoma atra* in U.S.A., III. **248.**
Red-winged Blackbird (see *Agelaius phoeniceus*).
Redwood (*Sequoia sempervirens*), *Pseudococcus* spp. on, in California, II. **435, 436.**
Reed Grass (see *Phragmites communis*).
regale, Sciapteron.
Regulus regulus, destroying insects in Germany, I. **372,** II. **147.**
reichei, Promecotheca.
reidi, Acanthopsyche; *Cratosomus*.
relictus, Ligyrus.
Remigia archesia (see *Mocis undata*).
Remigia repanda (see *Mocis*).
remus, Perimeles.
renalis, Haemerosia.
repanda, Brachyglottis; *Coccinella*; *Mocis* (*Remigia*).
Repsimus aeneus, on sugar-cane in Queensland, III. **491.**
Reseda, Piesma capitata on, in Russia, III. **543.**
Reseda luteola, Chloridea obsoleta on, in U.S.A., III. **471.**

Resin, as an adhesive, formulae containing, I. 132, 191, 238, 252, 300, II. 110, 180, 236, 274, 282, 339, 374, 416, 649, III. 79, 282, 490.
resinatum, Lecanium.
resinella, Rhyacionia (*Evetria, Retinia*).
resplendens, Dicaelotus.
reticulana, Adoxophyes (*Capua*).
reticulata, Aphis ; *Diastocera.*
Retinia (see *Rhyacionia*).
retusum, Trypodendron.
retusus, Gnathotrichus ; *Xylonites.*
Réunion, *Aspidiotus destructor* on coconut in, I. 136; insect pests of, II. 215, 216; *Oryctes* on palms in, II. 99.
reunitor, Ichneutes.
reuteri, Drepanothrips.
Rhabdocnemis, on sugar-cane in Queensland, III. 289.
Rhabdocnemis interruptocostata, in Java, III. 316.
Rhabdocnemis obscurus, III. 133; on coconut in South Sea Islands, II. 2; distribution of, on coconut and sugar-cane, II. 690; on pine-apples in California, I. 426; *Ceromasia sphenophori* parasite of, in Hawaii, III. 88, 758; importation of *Ceromasia sphenophori* into Fiji against, III. 88.
Rhabdophaga clavifex, on willows in Russia, III. 223.
Rhabdophaga heterobia, on willows in Russia, III. 223.
Rhabdophaga pulvini, on willows in France, II. 290.
Rhabdophaga rosaria, on willows in France, II. 290; on osiers in Holland, I. 386.
Rhabdophaga (*Cecidomyia*) *salicis-perda*, on willows in Holland, I. 386; on willows in Italy, III. 124.
Rhabdopterus picipes (Cranberry Rootworm), bionomics of, in U.S.A., III. 545, 672, 673.
Rhabdotis sobrina, in S. Rhodesia, III. 174.
Rhadinoscapus nociturus, on coffee in E. Africa, I. 414.
Rhagidia, parasite of *Lasioderma sericorne* in the Philippines, I. 170.
Rhagium bifasciatum, on *Pinus sylvestris* in Britain, I. 157.
Rhagodia, Pulvinaria maskelli on, in Australia, III. 503.
Rhagoletis cerasi (Cherry Fly), conditions unfavourable to, in England, II. 238; on cherries imported into England, II. 55; in France, II. 421; on cherries, etc., in Russia, III. 605.
Rhagoletis cingulata, III. 30; bionomics and control of, in Canada and U.S.A., I. 135, 178, 405, 406, III. 293, 408, 552; not recorded in Canada since 1906, II. 676.
Rhagoletis fausta (Black-bodied Cherry Fruit-fly), III. 30; control of, on cherries in Canada, I. 178, 405, 406, III. 293, 408.
Rhagoletis juniperinus, on juniper in U.S.A., III. 580, 581.
Rhagoletis pomonella (Apple Maggot, Railroad Worm), bionomics and control of, in Canada and U.S.A., I. 290, 403, II. 359, 491, 665, III. 30, 37, 43, 57–59, 69, 71, 89, 358, 413, 515, 551, 552, 619, 734, 753; declared a pest in Nova Scotia, III. 71; infesting blueberries, etc., III. 57, 89.
rhagoletis, Biosteres.
Rhamnus frangula (Buckthorn), *Clusia ambiguella* on, in Russia, III. 210.
Ramphus pulicarius, on apple and pear in Russia, III. 222.
rhediella, Pammene.
Rhembastus varipes, on *Manihot glaziovii* in Africa, II. 415.
rhexia, Heliothis (see *Chloridea virescens*).
Rhigopsidius tucumanus, on potatoes in S. America, I. 547, II. 241, 460.
Rhina barbirostris, on coconut in Br. Guiana, II. 569; on coconut in Trinidad, I. 285.
Rhina nigra, on coconut in Madagascar, I. 425.
Rhinanthus crista-galli, in fallow land in Russia, II. 212, 315.
Rhinaria perdix (Strawberry Weevil), bionomics and control of, in Australia, III. 366.
Rhinoceros Beetle, on coconut in E. Africa, I. 392, 393; traps for, in Ceylon, II. 540, III. 62; kreso disinfectant against, in Jamaica, III. 650; on coconut, etc., in Seychelles, II. 567; (see *Archon, Oryctes, Strategus*).
rhinoceros, Oryctes.
Rhinocola dianthi, in S. Africa, III. 503.
Rhinocola eucalypti, in S. Africa, III. 503.
Rhinoctonus ampelinus, in Turkestan, III. 92.
Rhinopsylla lamborni, sp. n., in Nigeria, II. 203.
Rhinotermes marginalis, on sugar-cane in Barbados, II. 284.
Rhinotermes putorius, in Zanzibar, III. 124.

Rhipiphorus pectinatus, attacking *Tiphia inornata* in U.S.A., III. 88.
Rhizobius graminis, on wheat in Europe and Egypt, III. 749.
Rhizobius (*Lindorus*) *lophantae*, predaceous on Coccids, II. 86, 128, 207, 296, III. 590; introduced into California, II. 437.
Rhizobius pini, on pines in England, III. 633.
Rhizobius toowoombae, introduced into Hawaii against mealy bugs, III. 757.
Rhizobius ventralis, introduced into Hawaii against scale-insects, III. 568, 757; predaceous on Coccids in U.S.A., I. 310, II. 437, 673, III. 143; introduction of, into Italy against Coccids, II. 86.
Rhizobius viridis, sp. n., on spruce in England, III. 633.
Rhizococcus lecanioides, sp. n., on *Casuarina* in Australia, III. 548.
Rhizococcus lobulatus, sp. n., on *Acacia pendula* in Australia, III. 548.
Rhizococcus multispinosus, not recommended to be introduced into Queensland against prickly pear, III. 126.
Rhizoctonia, on potatoes in India, III. 323.
Rhizoctonus ampelinus, on *Pyrus* in Russia, II. 79.
Rhizoglyphus, imported in mango seeds into U.S.A., II. 461.
Rhizoglyphus echinopus, on narcissus in Ireland, II. 656; on beetroot and onions in Russia, II. 467, III. 544.
Rhizoglyphus hyacinthi (Common Bulb Mite), on onions, etc., in Canada and U.S.A., II. 491, 536, 676, 677, III. 150; intercepted on bulbs in U.S.A., III. 513.
Rhizoglyphus phylloxerae, on asparagus in New Jersey, III. 566; predaceous on *Horistonotus brevipennis* in S. Carolina, III. 693.
Rhizoglyphus rhizophagus, on onions in California, III. 690.
Rhizopertha dominica, damaging stored grain in India, II. 205, III. 145; destroying biscuits, I. 292.
rhizophagus, *Rhizoglyphus*.
Rhizophora mucronata (Mangrove), *Ctenochiton rhizophorae* on, in Australia, III. 652.
rhizophorae, *Ctenochiton*.
Rhizotrogus aequinoctialis, destroyed by rooks in Russia, III. 342.
Rhizotrogus aestivalis, on lettuce and chicory, I. 256, 504; in Russia, III. 47.
Rhizotrogus aestivus, destroyed by rooks in Russia, III. 341.
Rhizotrogus ciliatus, on vines in Italy, III. 112.
Rhizotrogus euphytus, on vines in Italy, III. 112.
Rhizotrogus sicelis (see *Geotrogus*).
Rhizotrogus solstitialis (see *Amphimallus*).
Rhizotrogus tarsalis, on vines in Italy, III. 112.
Rhodesia, citrus pests in, II. 595-596; fruit-flies from, III. 748; legislation against insect pests in, II. 163; miscellaneous insect pests in, I. 289, 290, 466, II. 162, 235, 236, 280, 706, III. 174, 359, 617; pests of tobacco in, I. 287, 307, III. 359.
Rhodites centifolia, on roses in Russia, II. 720.
Rhodites eglanteriae, on roses in Russia, III. 610.
Rhodites orthospina, on *Rosa rubiginosa* in Russia, II. 720.
Rhodites rosae, on roses in N. Italy, III. 124; on roses in Russia, II. 720, III. 225, 393; galls of, eaten by birds, I. 169.
rhododactylus, *Platyptilia*.
rhododendri, *Aegeria* (*Sesia*); *Tingis*.
Rhododendron, *Leptobyrsa explanata* on, in Canada and U.S.A., III. 193, 515; *Otiorrhynchus sulcatus* on, in Europe, II. 183; pests of, in Holland, I. 385, II. 641, III. 199; *Odontoptera bidentata* on, in Scotland, II. 498; pests of, imported into U.S.A. from Holland, III. 355, 469.
Rhododendron maximum, *Leptobyrsa explanata* on, in California, III. 635.
Rhododendron occidentale, *Hoplia pubescens* on, in California, II. 708.
Rhododendron Lace Bug (see *Leptobyrsa explanata*).
Rhogas, parasite of *Dendrolimus segregatus* in Russia, II. 223.
Rhogas atricornis, parasite of *Cirphis* spp. in Texas, III. 684.
Rhogas esenbeckii, II. 222.
Rhogas kitcheneri, parasite of *Earias*, etc., in Egypt, II. 321.
Rhogas lefroyi, parasite of *Earias* in India, II. 322, III. 144.
rhois, *Rhopalosiphum*.
rhombifolius, *Orophus* (*Microcentrum*).
rhombota, *Agriophara*.
Rhopaea vestita, on sugar-cane in Fiji, III. 748.
Rhopalicus, II. 473.
Rhopaloblaste, *Clerome gracilis* on, in Straits Settlements, II. 98.

Rhopalocampta forestan, on cacao in S. Nigeria, II. 107.
Rhopalomyia grossulariae (Gooseberry Gall Midge), on gooseberry in England, II. 563.
Rhopalomyia hypogaea (see *Misospatha*).
Rhopalophora collaris, on citrus in Brazil, II. 173.
Rhopalopus clavipes, in orchards in Astrachan, III. 221.
Rhopalosiphum arbuti, on manzanita in California, III. 275.
Rhopalosiphum betae, sp. n., on beets, etc., in Britain, I. 77.
Rhopalosiphum britteni, on currants in Britain, I. 236.
Rhopalosiphum capreae, migration of, in Colorado, III. 351.
Rhopalosiphum carduellinum, sp. n., on *Carduus* in the Transvaal, III. 749.
Rhopalosiphum dianthi (Green Peach Aphis), food-plants of, in Africa, III. 749; bionomics and control of, in S. Africa, II. 47, 48, 573; in S. Australia, III. 527; on peaches and apricots in Britain, I. 433; measures against, in France, II. 390, 391.
Rhopalosiphum (*Phorodon*) *galeopsidis*, on *Polygonum* in California, II. 251.
Rhopalosiphum hippophaes, migration of, in Colorado, III. 351; synonyms of, III. 573.
Rhopalosiphum lactucae, on *Sonchus* in E. Africa, II. 571; in Africa and Europe, II. 276; on black currants in Germany, II. 500; food-plants of, in U.S.A., II. 510, III. 351, 570.
Rhopalosiphum lactucellum, sp. n., food-plants of, in Egypt, III. 749.
Rhopalosiphum lonicerae, II. 406.
Rhopalosiphum nervatum, on hazelnut in California, II. 251.
Rhopalosiphum (*Siphocoryne*) *nymphaeae* (*Aphis prunorum*), bionomics of, in Russia, II. 79, 81, 715, III. 639; bionomics of, in U.S.A., III. 423, 631; food-plants of, III. 749.
Rhopalosiphum pastinacae, migration of, in Colorado, III. 351.
Rhopalosiphum persicae, on *Prunus* in Russia, II. 79.
Rhopalosiphum rhois, food-plants of, in Colorado, III. 351.
Rhopalosiphum ribis, in Norway, III. 108; bionomics of, in Russia, II. 35, 79, 81, 370, III. 606; effect of nicotine on, II. 50.
Rhopalosiphum rumicis, I. 78.
Rhopalosiphum sisymbrii, on *Sisymbrium arnottianum* in Italy, III. 55.
Rhopalosiphum solani, on potato in England, III. 287; on potato etc. in U.S.A., III. 192, 547.
Rhopalosiphum violae, in U.S.A., III. 761.
Rhopalus parumpunctatus (see *Corizus*).
Rhopalus (*Brachycarenus*) *tigrinus*, on hay in Russia, III. 479.
Rhopobota vacciniana, on cranberries in Massachusetts, III. 532.
Rhopoideus citrinus, parasite of *Aspidiotus perniciosus* in U.S.A., III. 417.
Rhoptromeris wildhami, parasite of *Oscinella frit* in Russia, I. 214, II. 371, III. 47.
Rhubarb (*Rheum*), *Gryllotalpa africana* on, in E. Africa, I. 246; pests of, in Canada and U.S.A., I. 92, 93, 225, 324, III. 69, 678; *Aphis rumicis* (*papaveris*) on, in France, I. 188; *Cneorrhinus geminatus* on, in Holland, III. 198.
Rhubarb Weevil (see *Lixus concavus*).
Rhus aztechesan, *Saissetia cuneiformis* on, in E. Africa, II. 346.
Rhus canadensis, *Lygus invitus* on, in U.S.A., II. 135.
Rhus glabra (Sumach), *Polychrosis botrana* on, in Russia, III. 210.
Rhus trilobata, *Rhopalosiphum rhois* on, in Colorado, III. 351.
Rhyacionia (*Evetria*, *Retinia*), in forests in Russia, II. 13, 332, III. 728; parasitised by *Podogaster evetrivorus* in New Mexico, III. 18.
Rhyacionia albicapitana, sp. n., on *Pinus divaricata* in U.S.A., III. 248.
Rhyacionia buoliana (European Pine-shoot Moth), on firs in Holland, I. 386; bionomics of, on Conifers in Russia, I. 493, 539, II. 516, III. 402, 544; imported into U.S.A., II. 702, III. 421; on Conifers in U.S.A., III. 373, 376; quarantine measures against, in U.S.A., III. 549.
Rhyacionia bushnelli, sp. n., on pines in U.S.A., III. 248.
Rhyacionia duplana, on pines in Russia, I. 539, II. 516.
Rhyacionia frustrana, on *Pinus echinata* in U.S.A., III. 725.
Rhyacionia metallica, sp. n., on *Pinus ponderosa* in U.S.A., III. 248.

Rhyacionia mortana, sp. n., on *Pinus contorta* in U.S.A., III. 248.
Rhyacionia resinella, on firs in Holland, I. 386; on pines in Russia, II. 341, III. 606; on pines in Scandinavia, III. 291, 696.
Rhyacionia taxifoliella, sp. n., on *Pseudotsuga taxifolia* in U.S.A., III. 248.
Rhyacionia virginiana, sp. n., on *Pinus virginiana* in U.S.A., III. 248.
Rhynchaenus (*Orchestes*) *alni*, on alder in France, III. 694.
Rhynchaenus (*Orchestes*) *canus*, bionomics of, on apple in Illinois, III. 456.
Rhynchaenus (*Orchestes*) *fagi*, on beech in Britain, I. 236, III. 715; food-plants of, in Holland, III. 743.
Rhynchaenus (*Orchestes*) *mangiferae*, sp. n., on mango in India, III. 444.
Rhynchaenus (*Orchestes*) *quercus*, in Holland, III. 743; on oak in Russia, III. 105, 438.
Rhynchaenus (*Orchestes*) *rufus*, on elm in France, III. 694.
rhynchias, *Argyroploce*.
Rhynchites, in French vineyards, II. 400; on almonds and olives in Italy, II. 327, 328, III. 55; in orchards in Russia, II. 298, 428.
Rhynchites aeneovirens, on strawberries in France, II. 421; on strawberries in Holland, III. 743.
Rhynchites aequatus, in orchards in Russia, I. 367, 397, 439, II. 42, III. 47, 51, 222, 225, 399, 535.
Rhynchites auratus, bionomics of, in orchards in Russia and Turkestan, I. 436, 437, 439–441, 536, II. 73, 370, 374, 483, 614, 635, 636, 700, 714, 718, III. 47, 51, 172, 222, 224, 240, 241, 393, 399, 535, 601, 605, 641.
Rhynchites bacchus, food-plants of, in France, II. 449; bionomics of, in orchards in Russia, I. 357, 367, 397, 438, 460, 493, II. 42, 330, III. 47, 52, 222, 225, 393, 399, 402, 533, 540, 601, 641.
Rhynchites betulae, in France, II. 194, 421; on vines in Russia, III. 50, 477.
Rhynchites betuleti (see *Byctiscus betulae*).
Rhynchites bicolor (Rose Curculio), on blackberry and rose in U.S.A., III. 265, 625.
Rhynchites coeruleus, on apricots in Algeria, III. 739; bionomics of, on fruit trees in France, II. 449.
Rhynchites conicus (see *R. coeruleus*).
Rhynchites cupreus, on fruit trees in Russia, I. 439, III. 393, 402, 535, 605.
Rhynchites fragariae, on strawberries in France, I. 235.
Rhynchites giganteus, in orchards in Russia, I. 438, 439, 492, III. 52, 393, 402, 534, 540, 601.
Rhynchites minutus (see *R. aeneovirens*).
Rhynchites pauxillus, bionomics of, in orchards in Russia, I. 357, 397, 460, 488, 492, II. 42, 330, 366, 482, 515, III. 47, 51, 52, 66, 105, 204, 222, 224, 225, 336, 339, 392, 402, 442, 482, 533, 539, 540, 601, 613.
Rhynchium ventrale, predaceous on *Earias biplaga* in Nigeria, III. 164.
Rhyncholophus, predaceous on froghoppers in Trinidad, II. 62.
Rhyncholophus gracilipes, predaceous on *Tetranychus telarius* in U.S.A., III. 64.
Rhyncholophus parvulus, predaceous on *Typhlocyba comes* in U.S.A., II. 282.
Rhynchophorus cruentatus, on palms in tropical America, II. 99.
Rhynchophorus ferrugineus (Asiatic Palm Weevil), on coconut, etc., in Australasia, II. 690; on coconut in Ceylon, II. 643; in Indian Archipelago and New Guinea, II. 7; on coconut in Java, III. 713; on coconut in Philippines, I. 314; not found in Samoa, II. 7; on coconut in South Sea Islands, II. 2; legislation against, in Straits Settlements, II. 98; list of palms damaged by, in Straits Settlements, II. 99; geographical distribution of, II. 99.
Rhynchophorus palmarum (American Palm Weevil, Grugru Worm), in tropical America, II. 99; on coconut in Brazil, III. 695; on sugar-cane and coconut in Br. Guiana, I. 139, 522, II. 58, 569; on sugar-cane and coconut in West Indies, I. 285, II. 31, 87, 143.
Rhynchophorus phoenicis (African Palm Weevil), on palms in tropical Africa, I. 49, 414, II, 99, 108, 283, 445, 671.
Rhynchophorus signaticollis (see *R. ferrugineus*).
Rhyssemus asper (*germanus*), on lucerne and clover in Russia, III. 543.

Rhytisma acerinum, infesting mountain maple in Russia, III. 544.
Ribbed Case Moth (see *Hyalarcta nigrescens*).
Ribbed Tea Mite (see *Eriophyes carinatus*).
ribeana, Tortrix (*Pandemis*).
ribearia, Cymatophora (*Diastictis*).
Ribes, Aphids on, II. 79, 208, 406, III. 718; *Aspidiotus perniciosus* on, I. 472; *Aspidiotus tasmaniae* on, in Australia, III. 548.
Ribes alpinum, Eriophyes ribis on, in Germany, II. 296; *Eriophyes scaber* on, in Russia, III. 224; *Eriosoma ulmi* on, II. 406.
Ribes aureum, Rhopalosiphum lactucae on, in Colorado, III. 351; *Eriosoma ulmi* on, II. 406.
Ribes grossularia (see Gooseberry).
Ribes nigrum (see Currant, Black).
Ribes rubrum (see Currant, Red).
Ribes sanguineum, Pseudococcus gahani on, in Britain, III. 754.
Ribes uva-crispa, Aulacaspis pentagona on, in Italy, I. 222.
Ribes vulgare, Rhopalosiphum lactucae on, in Colorado, III. 351.
ribesii, Polysphincta; *Pteronus* (*Nematus*); *Syrphus*.
ribicolus, Myzus.
ribis, Aphis; *Bryobia* (see *B. pretiosa*); *Eriophyes*; *Eulecanium* (*Lecanium*); *Lysiphlebus*; *Macrophya*; *Myzus*; *Rhopalosiphum*.
riccae, Leucaspis.
Rice (*Oryza sativa*), *Conocephalus nitidulus* on, in E. Africa, I. 413; pests of, in Brazil, II. 28; pests of, in Br. Guiana, I. 139, 318, 319, 480, II. 519, 568, III. 591; legislation against pests of, in Br. Guiana, III. 175; locusts on, in Canada, III. 368; pests of, in Ceylon, I. 89; *Ephydra macellaria* on, in Egypt, I. 501; pests of, in Far East, II. 489; pests of, in India, I. 169, 170, 344, 351, II. 60, 67–69, 139, 487, III. 144, 174, 345; pests of, in Italy, II. 151, III. 53, 151; pests of, in Japan, I. 519; *Anticyra combusta* on, in Java, I. 169; pests of, in Malaya, I. 273, II. 111, III. 467; *Prodenia litura* on, in Philippines, I. 482; pests of, in U.S.A., I. 151, 262, III. 131, 463.
Rice Bug (see *Leptocorisa varicornis*).
Rice Caterpillar (see *Laphygma frugiperda*).
Rice-leaf Caterpillar (see *Melanitis ismene*).
Rice Leaf-hopper (see *Nephotettix bipunctatus*).
Rice Plant Borer, Larger (see *Sesamia inferens*); Three-brooded (see *Schoenobius bipunctifer*); Two-brooded (see *Chilo simplex*).
Rice Skipper (see *Parnara mathias*).
Rice Water Weevil (see *Lissorhoptrus simplex*).
Rice Weevil (see *Calandra oryzae*).
ricini, Aleurodes; *Attacus*; *Pericallia* (*Arctia*).
Ricinus communis (see Castor Oil Plant).
rigidus, Cephalobus.
rileyi, Eriosoma (*Schizoneura*); *Eupachylomma* (*Wesmaelia*).
Rind Disease of Sugar-cane (see *Melanconium sacchari*).
Rioxa (*Trypeta*) *musae*, in Australia and New Hebrides, III. 3.
riparia, Labidura.
Ripe-rot (*Gloeosporium*), attacking bananas in Queensland, II. 511.
Ripersia, on sugar-cane in Br. Guiana, II. 417, 520; much parasitised in India, III. 723; on cotton in S. Nigeria, II. 106.
Ripersia globata, sp. n., food-plants of, in New Zealand, III. 721.
Ripersia occulta, sp. n., on grass in New Zealand, III. 721.
Ripersia theae, sp. n., on tea in Ceylon, III. 157, 755.
Riptortus fuscus, on tea and *Hevea* in Ceylon, III. 157.
Riptortus pedestris, on tea in Ceylon, III. 157; on wheat and pulse in S. India, III. 157.
Riptortus tenuicornis, on coffee in S. Nigeria, II. 108.
ritsema-bosi, Aphelenchus.
riverae, Aspidiotus.
rivillei, Antispila.
Robin, American (see *Planesticus migratorius*).
Robin, Demerara (see *Leistes guianensis*).
Robinia, Aphis laburni on, in Egypt, III. 749.
Robinia pseudacacia (see Locust Tree).
robiniae, Cyllene; *Prionoxystus*.
robiniarum, Eulecanium (*Lecanium*).
roborana, Eucosma.
roborator, Pimpla.
roboris, Kermes; *Pterochlorus*.
robusta, Peleteiria.
robustus, Kakothrips (*Frankliniella, Physapus*); *Pimelopus*.
Rocket, False (*Diplotaxis erucoides*), II. 228.
rodiaei, Nectandra.
Roeselia antiqua, parasite of *Lymantria dispar* in Europe, I. 362, 481.

roesella, Eulophus ; *Heliodines.*
Roller (see *Coracias garrula*).
rooana, Olethreutes.
Rook (*Corvus frugilegus*), destroying insects, I. 360, 462, 494, II. 8, 222, 504, III. 20, 196, 243, 341, 404, 537.
Root Gallworm (see *Heterodera*).
Root Knot, on tomatoes, etc., in U.S.A., III. 177, 594.
ropalus, Syrphus.
rorellus, Hyponomeuta.
Rosa, pests of, in U.S.A., II. 94, III. 423, 471; *Aspidiotus perniciosus* on, I. 472; *Aulacaspis rosae* on, in E. Africa, II. 429; (see Rose).
Rosa canina, Clinodiplosis on, in France, I. 424; *Rhodites rosae* on, in Russia, II. 720.
Rosa rubiginosa, Rhodites orthospina on, in Russia, II. 720.
Rosa rugosa, borer of, in Holland, III. 194; *Agrilus* spp. on, in U.S.A., III. 132, 515.
rosaceana, Cacoecia (*Archips*).
rosae, Aulacaspis (*Diaspis*); *Empoa*; *Habrocytus* ; *Hylotoma* ; *Lachnus* ; *Macrosiphum* (*Nectarophora, Siphonophora*) ; *Psila* ; *Rhodites* ; *Typhlocyba.*
rosaefolium, Macrosiphum.
rosaeformis, Macrosiphum.
rosaeollae, Macrosiphum.
rosana, Cacoecia (*Archips*).
rosaria, Rhabdophaga (*Cecidomyia*).
rosarum, Hylotoma ; *Myzus* ; *Macrosiphum* (*Siphonophora*).
Rose, list of Aphids occurring on, III. 748, 749; pests of, in S. Africa, I. 303, II. 300; pests of, in Australia, I. 195, II. 584; pests of, in Brazil, III. 169; pests of, in Britain, I. 388, II. 652, 656, III. 74, 676, 715; pests of, in Canada, II. 491, III. 551, 620; pests of, in Ceylon, II. 644, III. 123; *Chrysomphalus aonidum* on, in Egypt, II. 605; pests of, in France, I. 334, 480, II. 448; *Xyleborus dispar* on, in Germany, II. 486; Aphids intercepted on, in Hawaii, III. 657; pests of, in Holland, I. 386, II. 641, 642, III. 198, 742; *Icerya seychellarum* on, in Mauritius, II. 612; scale-insects on, in Peru, III. 135; pests of, in Russia, I. 497, 499, II. 442, 613, 714, 719, 720, III. 45, 47, 75, 105, 401, 443, 601, 610; pests of, in Seychelles, I. 129, II. 566; spinning mites on, in Sweden, III. 253; pests of, in U.S.A., I. 99, 140, 153, 225, 240, 297, 381, 425, 430, II. 83, 116, 188, 217, 294, 347, 390, 439, 527, 528, 599; III. 15, 64, 132, 265, 270, 352, 354, 357, 414, 422, 513, 515, 566, 625, 668, 709, 725; pests imported on, into U.S.A., III. 354, 469, 494, 513, 626; pests of, in West Indies, I. 165, 252, II. 50; not attacked by *Aporia crataegi* in Russia, II. 468; not attacked by *Tortrix forskaleana*, II. 168.
Rose Aphis (see *Macrosiphum rosae*).
Rose Apple (see *Eugenia jambos*).
Rose Apple, Malay (see *Eugenia malaccensis*).
Rose Beetle (see *Adoretus vestitus*).
Rose Chafer (see *Macrodactylus subspinosus*).
Rose Curculio (see *Rhynchites bicolor*).
Rose-laurel, *Saissetia oleae* on, in N. Africa, II. 349.
Rose Leaf-hopper (see *Empoa rosae, Typhlocyba rosae*).
Rose Sawfly (see *Hylotoma rosae*).
Rose Scale (see *Aulacaspis rosae*).
Rose Slug-caterpillar (see *Euclea indetermina*).
Rose Starling (see *Pastor roseus*).
Rose Weevil (see *Rhynchites bicolor*).
roseicollis, Scymnus.
roseipennis, Reduviolus.
roseus, Trichoniscus.
rosinella, Rhyacionia (*Evetria*).
Rosmarinus officinalis (Rosemary), *Polychrosis botrana* on, in Russia, III. 210.
Ross Scale (see *Chrysomphalus rossi*).
rossi, Chrysomphalus.
rossicum, Isosoma.
Rossikov's remedy, against *Melolontha*, formula for, III. 343.
rostrata, Aelia.
Rosy Apple Aphis (see *Aphis sorbi*).
rothei, Lepidiota.
rotundatus, Bracon ; *Otiorrhynchus* ; *Scymnus.*
rotundicolle, Diploschema.
Round-headed Apple-tree Borer (see *Saperda candida*).
Rowan (see Ash, Mountain).
Royal Palm (*Oreodoxa regia*), *Rhynchophorus ferrugineus* on, in Straits Settlements, II. 99; *Pseudaonidia oreodoxae* on, in Ceylon, III. 168.
Rozites gongylophora, cultivation of, by *Atta* spp. in Brazil, II. 28.
Rubber, pests of, in W. Africa, I. 351, II. 142, 415, III. 166; pests of, in Brazil, I. 351, II. 193; pests of, in Br. Guiana, I. 139, II. 417, 568, III. 175, 591; legislation against pests of, in

Br. Guiana, III. 175; *Chrysomphalus aurantii citrinus* on, in California, III. 689; pests of, in Ceylon, I. 88, II. 191, 192, 268, 513, 643, 644; ordinance restricting importation of, into Gold Coast, II. 278; pests of, in Hawaii, I. 351; pests of, in Java, I. 355, II. 414, 415, 533-535, III. 713; pests of, in Malaya, I. 217, 273, II. 111, 133, III. 12; pests of, in Seychelles, I. 76; pests of, in Uganda and E. Africa, I. 49, 247, 349, 414, 415, 476, 477, II. 283, 413-416, 575, 592, III. 752.
Rubber, Castilloa (see *Castilloa elastica*).
Rubber, Ceara (see *Manihot glaziovii*).
Rubber, Funtumia (see *Funtumia elastica*).
Rubber, Maniçoba (see *Sapium*).
Rubber, Para (see *Hevea brasiliensis*).
rubellus, Cyrtacanthacris (*Acridium*).
rubens, Ceroplastes.
rubi, Anthonomus; *Batophila*; *Macrothylacia*; *Metallus*; *Monophadnus* (*Monophadnoides*); *Neotetranychus.*
rubicola, Amphorophora; *Macrosiphum.*
rubidus, Zelus.
rubiella, Incurvaria (*Lampronia*).
rubigalis, Pionea (*Phlyctaenia*).
rubigana, Conchylis (see *Phalonia badiana*).
rubiginosus, Dindymus.
Rubina, in sprays against vine moths, I. 10, 230.
rubiphila, Aphis.
rubivora, Phorbia.
rubra, Tetraneura; *Tomaspis.*
rubribullata, Aspidiotus.
rubrizonella, Nephopteryx.
rubrocinctus, Heliothrips (*Selenothrips*).
rubrosignatus, Cyllophorus.
Rubus, list of Aphids on, in Russia, II. 79; *Oecanthus pellucens* on, in S. Russia, III. 441.
Rubus caesius (see Dewberry).
Rubus fructicosus (see Blackberry).
Rubus idaeus (see Raspberry).
Rubus nutkanus (Thimbleberry), *Amphorophora rubicola* on, in California, II. 251.
rubus, Batocera.
Rudbeckia, Diabrotica duodecimpunctata on, in U.S.A., I. 430.
rudbeckiae, Macrosiphum.
rudis, Panzeria.
rufa, Pachnoda; *Vespa.*
rufescens, Chalicodoma.
rufibarbis, Formica.
ruficeps, Alysia; *Ichneumon.*
ruficollis, Agrilus; *Dysdercus*; *Tituboea.*
ruficornis, Harpalus; *Plocaederus*; *Pristiphora*; *Trigonotylus.*
ruficrus, Apanteles.
rufilabris, Chrysopa.
rufimanus, Bruchus.
rufimitrana, Enarmonia (*Grapholitha*).
rufipennis, Polygraphus.
rufipes, Acropteron; *Cardiophorus*; *Derocrepis*; *Luperus*; *Lygocerus*; *Macrophya*; *Melanotus*; *Microdus*; *Necrobia*; *Stenobothrus* (see *Omocestus ventralis*); *Strophosomus*; *Tropicoris.*
rufitarsis, Cremnops.
rufiventris, Microplites; *Telenomus.*
rufocinctus, Emphytus.
rufocoxalis, Apanteles.
rufomaculatus, Micromelus.
rufopicta, Calidea.
rufosanguinea, Galleria.
rufovenalis, Melissoblaptes
rufovillosum, Xestobium.
rufus, Aptinothrips; *Dacus*; *Gomphocerus*; *Lophyrus*; *Rhynchaenus* (*Orchestes*).
rugiceps, Ligyrus.
rugicollis, Apriona; *Coelosternus*; *Plesiocoris.*
rugifrons, Otiorrhynchus.
rugosa, Secodella; *Trigonogastra.*
rugosana, Phtheochroa.
rugosicollis, Uromenus (*Ephippigera*).
rugosithorax, Pleurotropis.
rugosus, Helophorus; *Hippiscus*; *Thanatophilus.*
rugulosus, Nabis; *Scolytus* (*Eccoptogaster*).
Rumania, *Psylliodes attenuata* in, I. 342; *Psalidium maxillosum* on vines in, II. 465; *Hyponomeuta malinellus* in, II. 564, III. 344.
Rumex (Dock), Aphids on, II. 17, 236, 406, 660, III. 352, 749; *Syromastes marginatus* on, in Russia, III. 7.
Rumex acetosella, Otiorrhynchus ovatus on, I. 92; *Crambus caliginosellus* on, in Virginia, II. 525.
Rumex confertus, Haltica oleracea experimentally fed on, in Russia, III. 538.
Rumex crispus, Lixus concavus ovipositing on, I. 37.
Rumex hymenosepalus, Limonius californicus on, in California, II. 303.
rumicis, Acronycta; *Aphis*; *Rhopalosiphum.*
rusci, Ceroplastes.
ruspator, Monochamus.

russelli, Thripoctenus.
Russia, beet pests in, I. 357, 394, 459, 478, 485–487, 489, 493, 500, 539, II. 34, 43, 63, 177–180, 248, 314, 340, 425, 442, 465–468, 481, 504, 523, 648, 715, 718, III. 19, 50, 67, 93, 102, 105, 119, 222, 309, 394, 403, 443, 480, 536, 542, 592, 610, 635, 640; chrysanthemum pests in, II. 424; clover pests in, III. 8, 112, 641; cotton pests in, II. 73, 75, 198, 262, 311, 314, 423, 649, 715, III. 338, 702; pests of filberts in, II. 672; forest pests in, I. 362, 387, 395, 539, II. 9, 10, 12, 13, 198, 220–223, 274, 275, 304, 329, 331, 337, 341, 482, 483, 516, 692, 699, III. 14, 43, 48, 50, 76, 119, 138, 214, 217, 223, 227, 228, 337, 341, 342, 343, 391, 392, 394, 398, 437, 482, 485, 544, 592–599, 603, 607, 699, 728; pests of grain crops in, I. 201, 214, 216, 364, 446–450, 450, 451, 457, 458, 479, 484, 487, 490, 530, II. 5, 9, 10, 11, 12, 110, 170–173, 201, 202, 261, 290, 319, 350–353, 391, 470–473, 496, 648, 712, III. 4, 15, 19, 47, 50, 66, 68, 75, 98, 110, 111, 128, 147, 148, 183, 205, 222, 229, 230–232, 237, 307, 309, 338, 339, 341, 402, 440, 478, 480, 483, 485, 486, 541, 601, 634, 635, lucerne pests in, I. 526, 527, II. 262, 395, 668, 669; pests of market-gardens in, I. 207, 210–213, 463, II. 52, 53, 266, 501, 521, 649, 713, III. 100, 101, 104, 148, 152, 172, 218, 340, 388, 440, 486, 608, 701; miscellaneous pests in, I. 357–359, 361–364, 397–399, 459–461, 487, 488, 488–491, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 534–536, 537, 538, 539, 540, II. 36, 37, 39, 42, 43, 43–45, 63, 197–199, 213, 214, 333–335, 340, 341–343, 354, 370–372, 372–374, 423, 428, 441, 443, 463, 468, 514, 515, 523, 713–716, 716–718, III. 13, 41, 44–47, 50, 51, 52, 67, 74, 75, 105, 111, 171, 172, 203–206, 223, 224–227, 238, 337, 392, 395–398, 399, 400–403, 441, 479, 480–482, 539, 540, 541–544, 600–602, 606, 609, 610, 613, 638–641, 701; mustard pests in, I. 536, II. 355–358, III. 112, 212, 439, 637; orchard pests in, I. 205–209, 345–349, 363, 364–367, 367–370, 370, 431, 432, 436, 437, 438, 438–441, 489, 522, 531–533, II. 51, 54, 200, 258, 263–266, 291, 298, 317, 318, 329–331, 365, 366, 366–370, 374, 394, 419, 422, 442, 464, 480, 496, 513, 515, 524, 613, 614, 615, 638, 647, 650, 700, 701, 712, 713, III. 13, 20, 21, 26, 48, 66, 76, 99, 100, 101, 104, 118, 119, 120, 129, 138, 139, 152, 172, 182, 183, 213, 214, 215, 234, 240, 241, 310, 339, 442, 482, 484, 485, 533–535, 538, 591, 599, 604, 608, 611, 642, 700, 727; rape pests in, I. 396, 397, III. 41, 112; rose pests in, II. 613, 719, 720, III. 75; pests of stored grain in, II. 39–41, 502, 503, III. 129, 487; tea pests in, III. 65; tobacco pests in, III. 343, 441; vine pests in, I. 363, 461, 462, II. 52, 167, 364, 495, 496, 638, 692, III. 26, 209–212, 405, 477, 538, 602, 701; walnut pests in, III. 206; pests of zoological collections in, III. 633; bionomics of *Acyrthosiphon pisi* in, III. 702–704; bionomics of *Anisoplia austriaca* in, II. 260; bionomics of Aphids in, II. 79–82, III. 607; bees and their diseases in, I. 441–446, II. 64, 677, 678, III. 38, 152, 592, 612; bionomics of *Biston hirtarius* in, III. 49; *Bostrychus capucinus* in oak imported from, I. 297; bionomics of *Bothynoderes punctiventris* in, II. 177, III. 51, 138; bionomics of *Brachycolus noxius* in, III. 307; bionomics of *Bupalus piniarius* in, III. 48; monograph of the genus *Chermes* in, III. 592–599; bionomics of *Cydia pomonella* in, I. 364–367, 367–370, 431, 432, II. 200; dragonflies attacking bees in, III. 103; bionomics of *Epicometis hirta* in, I. 531, II. 261; bionomics of *Eurytoma samsonovi* in, III. 728; bionomics of *Euxoa segetum* in, I. 462, II. 211, 212, 257, 314, 314–316, 469, 695, III. 536, 605, 634; bionomics of *Hypera murina* in, II. 108–110; bionomics of *Hyponomeuta malinellus* in, I. 345–349; descriptions of larvae of Lamellicorn beetles in, II. 110; locusts and their control in, I. 459, 542–544, 551, II. 37, 38, 39, 53, 65, 353, 473–475, 480, 521, 522, 614, III. 98, 109, 232, 239, 241, 242–244, 388, 399, 437, 536, 537, 603, 610, 636, 642, 699; bionomics of *Mayetiola destructor* in, II. 65; bionomics of *Phlyctaenodes sticticalis* in, I. 359–361, 394, 495, 497, 534, II. 63, 481, 521, III. 105, 232, 233, 403, 404,

700; legislation against *Phylloxera* in, II. 167, 496, 627, III. 405; new Proctotrupid parasites in, III. 439; injurious species of *Rhynchites* in, III. 533–535; Rhynchota of, III. 6, 727; sawflies of economic importance in, III. 389; bionomics of *Sciaphobus squalidus* in, II. 337–339; Thysanoptera of, II. 266, 267; bionomics of *Trichogramma semblidis* in, I. 318; economic entomology in, I. 550, II. 199, 213, 332, 443, III. 43, 60, 103, 213, 235–237, 238, 240, 244, 438, 599, 727; varieties of fallow land in, II. 315; free importation of insecticides into, III. 237; use of barium chloride as an insecticide in, III. 94, 108, 109, 218, 390, 395, 442, 602; importance of rooks in agriculture in, III. 341.

Rust Mite of Sugar-cane (see *Tarsonemus spinipes*).

Rust Mite of Olive (see *Eriophyes oleivorus*).

rustica, Tachina.

rusticator, Monochamus.

rusticus, Acocephalus; *Criocephalus.*

rusticellae, Phygadeuon.

Rusty Leaf Mite (see *Phyllocoptes schlectendali*).

Rusty Tussock Moth (see *Orgyia antiqua*).

ruthae, Odonaspis.

rutherfordi, Arthrocnodax.

Rutherglen Bug (see *Nysius vinitor*).

rutilana, Phalonia.

rutilans, Aegeria (*Sesia*).

ryani, Pseudococcus.

Rye (*Secale cereale*), pests of, in S. Africa, II. 153–155; pests of, in Algeria, II. 231; pests of, in Austria, II. 453, 475; pests of, in Canada and U.S.A., I. 53, 265, 412, 430, 453, II. 225, 473, III. 416, 509, 630, 693; pests of, in Denmark, III. 245, 246, 698; *Tylenchus dipsaci* on, in Europe, II. 625; pests of, in Far East, II. 489; pests of, in Germany, I. 340, II. 500; pests of, in Holland, I. 386, III. 202, 740, 743; pests of, in Russia, I. 458, 459, 487, 493, 532, II. 35, 40, 170, 172, 258, 265, 315, 351, 352, 371, 470–472, 473, 695, III. 50, 67, 103, 111, 128, 147, 205, 206, 220, 309, 337, 340, 398, 481, 487, 543, 610, 634, 635, 640, 700; pests of, in Sweden, III. 208, 525; not attacked by *Heterodera radicicola*, III. 178.

Rye Grass (see *Lolium perenne*).

S.

sabulifera, Anomis (*Gonitis*).

sabulosum, Opatrum

Sacadodes pyralis (Thurberia Boll-worm), on Arizona wild cotton, II. 272.

Sacbrood, in bees, I. 186, II. 102, 417, 530, 564, 678.

saccharalis, Diatraea; *Telenomus.*

saccharella, Polyocha (see *Papua depressella*).

sacchari, Alucita; *Aphis*; *Aspidiotus*; *Pseudococcus* (*Dactylopius*); *Targionia.*

saccharicaulis, Odonaspis secreta.

saccharicida, Perkinsiella.

saccharifera, Arenga.

saccharifolii, Chionaspis; *Pseudococcus.*

saccharina, Eldana; *Lepisma*; *Tomaspis.*

saccharinus, Myzocallis.

saccharivorus, Stenocranus (*Delphax*).

Saccharomyces glutinis, infesting bees in Russia, I. 445.

Saccharum officinarum (see Sugar-cane).

Saccharum soltwedeli, Chionaspis tegalensis on, in Java, III. 317.

Saccharum spontaneum, Pseudococcus (*Dactylopius*) *sacchari brasiliensis* on, in Brazil, II. 206; *Chionaspis tegalensis* on, in Java, III. 318.

sacculi, Asiphum.

sacharovi, Microterys; *Microtipus.*

sacra, Entomoscelis.

sacramenta, Coleophora.

Safflower, *Euplexia conducta* on, in India, II. 139.

Safonia, tests with, as a spray in New South Wales, I. 548.

Sagaritis, parasite of *Eriopus floridensis* in U.S.A., II. 92.

Sagaritis latratus, parasite of *Plutella maculipennis* in Russia, II. 356.

sagax, Pimpla.

Sage (see *Artemisia*).

Sage, Californian (*Artemisia californica*), scale-insects on, II. 435.

Sage, White (*Ramona polystachys*), *Pseudococcus* spp. on, in California, II. 247, 435.

Sagina, Myzocallis saccharinus on, in Italy, III. 54.

Sagittaria latifolia (Arrow-head), *Rhopalosiphum nymphaeae* on, in U.S.A., III. 631.

sagittarius, Polistes.

Sago Palm (*Cycas revoluta*), *Pseudococcus adonidum* on, in California, II. 436; *Zygothrips pullus* on, in Florida and Louisiana, III. 631; *Aspidiotus ficus* on, in Seychelles, I. 129.

Sagra, on *Tectona grandis* in India, III. 723.
Sahlbergella singularis (Cacao Bark-sapper), bionomics of, in W. Africa, II. 141, 634, 670, III. 528, 662.
Sahlbergella theobroma (Cacao Bark-sapper), bionomics of, in W. Africa, II. 141, 670, III. 165, 528, 662.
Sainfoin (*Onobrychis sativa*), *Colias* spp. on, in France, II. 577; pests of, in Germany, II. 500; pests of, in Italy, II. 511; pests of, in Russia, I. 486, II. 263, 465, 524, III. 703.
St. Croix, pests of sugar-cane in, I. 254, II. 49, 145, 693.
St. Kitts, insect pests of, I. 163, 165, 253, 263, II. 87, 88, 284, 603, 693, 698, III. 22, 73, 302.
St. Lucia, insect pests of, I. 76, 97, 253, 254, II. 87, 88, 92, 693, III. 22, 73.
St. Mark's Fly (see *Bibio marci*).
St. Thomas, *Eburia quadrimaculata* in, III. 365.
St. Vincent, insect pests of, I. 83, 165, 198, 253, 254, II. 62, 87, 92, 104, 143, 144, 284, 693, III. 22, 73, 367, 410, 736.
Saissetia anthurii, on asparagus in Australia. III. 652.
Saissetia coffeae, on coffee in Réunion, II. 216.
Saissetia cuneiformis, sp. n., on *Rhus aztechesan* in Eritrea, II. 346.
Saissetia depressa, on grapes in Australia, III. 653.
Saissetia filicum, on ferns in Australia, III. 653.
Saissetia (*Lecanium*) *formicarii*, on tea in Ceylon, II. 643.
Saissetia hemisphaerica (Brown Shield Scale), in Australia, III. 167, 653; measures against, in Britain, III. 676, 747; bionomics of, on citrus and coffee in Br. Guiana, II. 416, 417, 520, 569; parasites of, imported into California, II. 244; intercepted on palms, etc., in California, III. 626, 739; on tea in Ceylon, III. 157; in Chile, I. 138; on coffee in Colombia, II. 708; on ferns in Italy, III. 124; on coffee in Java, I. 150, III. 646; in Peru, III. 135; on *Justicia gendarussa* in Seychelles, II. 269; on citrus and egg-plant in West Indies, I. 251, III. 476.
Saissetia (*Lecanium*) *nigra*, on cotton, rubber, etc., in Tropical Africa, I 258, 415, II. 1, 429, 581, III. 125, 433; on cotton and rubber in Br. Guiana, I. 130, II. 417, 569; bionomics of, on cotton and rubber in Ceylon, II. 191, 192, 644; on *Anthurium* in Fiji, III. 548; on coffee in Réunion, II. 216; in Seychelles, I. 76, 129, 474, II. 567; on *Anona muricata* in Uganda, I. 258; on cotton, etc., in West Indies, I. 198, II. 87, 143, 191, III. 411; parasites of, III. 433, 725.
Saissetia oleae (Black Scale), on olive in Africa, III. 432; food-plants of, in Australia, III. 653; legislation against, in Br. Columbia, I. 48, 85; bionomics of, on citrus and coffee in Br. Guiana, II. 417, 520, 569; bionomics of, in California, I. 167, 310, 383, 427; II. 114, 706, 707, III. 85, 121, 349, 419, 558, 622, 623, 624, 688, 689; intercepted in California, III. 420, 626, 739; parasites of, introduced into California, II. 244, 298, 554, III. 690; control of, on citrus, etc., in the Mediterranean region, I. 278, 297, 380, 390, II. 349, 585, 609, III. 143; on olive in Palestine, II. 623; on cotton in Peru, III. 135; on *Ficus*, etc., in Seychelles, I. 76, 129, 474; in Uganda, I. 258; destroyed by thrushes in U.S.A., II. 585; natural enemies of, II. 286, 287, III. 85, 121, 143, 150, 349, 419, 432.
Saissetia (*Lecanium*) *punctulifera*, on mango in Zanzibar, III. 125.
saissetiae, Eupelmus.
Sal (*Shorea robusta*), pests of, in India, I. 381, III. 154, 722.
Sal Longicorn (see *Hoplocerambyx spinicornis*).
Sal Moth Borer (see *Pammene theristis*).
Sal-ammoniac and Paris Green, formulae for, II. 54, 626, III. 129.
Salda (*Acanthia*) *saltatoria*, imported into U.S.A. on azaleas from Belgium, III. 117.
saliceti, Aphis; Siphocoryne.
salicicola, Aphis.
salicinum, Capnodium.
saliciperda, Rhabdophaga (*Cecidomyia*).
salicis, Chionaspis; Leucaspis; Melanoxantherium; Pteronus (*Nematus*); *Stilpnotia* (*Leucoma*).
salicis-nigrae, Chionaspis.
salicola, Phylloxera.
saliens, Neuroterus.
salina, Oedipoda.
salinus, Pseudococcus.

Saliphuga, preying on *Lathrodectus tredecimguttatus* in Russia, III. 537.
Salix (see Willow).
Salix acutifolia, *Cimbex amerinae* on, in Russia, II. 45.
Salix aurita, *Chionaspis salicis* on, in England, III. 346; pests of, in France, II. 290.
Salix caprea, *Chionaspis salicis* on, in England, III. 346.
Salix cinerea, *Chionaspis salicis* on, in England, III. 346; pests of, in France, II. 290.
Salix depressa, pests of, in France, II. 290.
Salix fragilis, spraying experiments on, I. 334.
Salix humboldtiana, *Apate francisca* on, in Porto Rico, III. 517.
Salix humilis, *Euura cosensi* on, in U.S.A., III. 658.
Salix lasiolepis, *Phylloxera salicola* on, in California, III. 686.
Salix purpurea, pests of, in France, II. 290; *Labidostomis taxicornis* on, in Italy, III. 33.
Salix viminalis, *Melasoma populi* on, in France, I. 334.
Sallow, *Chionaspis salicis* on, in England, III. 346.
Salpingogaster nigra, parasite of froghoppers in Trinidad, II. 62, 95, 96, 460, III. 207, 555.
Salsify, pests of, in France, II. 270.
Salsola (Kelp), pests of, in Europe, II. 64, 90.
Salsola kali, *Phlyctaenodes sticticalis* on, in Russia, I. 360.
Salt (see Sodium Chloride).
Salt Marsh Caterpillar (see *Estigmene acraea*).
saltator, *Capsus*.
saltatoria, *Salda* (*Acanthia*).
saltatrix, *Meromyza*.
Saltpetre, against *Bibia hortulanus*, II. 35; against Elateridae, II. 199, III. 247; against *Oryctes rhinoceros*, II. 27; against *Tetranychus telarius*, II. 502.
saltuarius, *Monochamus*.
Saltusaphis scirpus, sp. n., on sedges in Egypt, III. 749.
Saluria ardiferella, predaceous on *Dactylopius confusus* in U.S.A., I. 81.
Salvia, *Aleurodes vaporariorum* on, in England, III. 285; *Phytometra chalcites* on, in New Zealand, III. 721; *Adelphocoris lineolatus* on, in Russia, II. 425.
Salvia fortunei, food-plant of *Aulacaspis pentagona*, I. 222.
Salvia officinalis, food-plant of *Aulacaspis pentagona*, I. 222.
Saman Tree (see *Pithecolobium saman*).
sambuci, *Aphis*.
Sambucus (see Elder).
Sambucus ebulus (Ground Elder), *Xanthoecia flavago* (*Gortyna ochracea*) on, in France, I. 410.
Sambucus nigra (Black Elder), *Aegeria* (*Sesia*) *tipuliformis* on, in France, I. 274.
Sambucus racemosa (Scarlet-berried Elder), *Clysia ambiguella* on, in Russia, III. 210.
Samia ceanothi, on sweet birch in California, III. 420.
Samia cecropia, in Canada, III. 552.
Samia cynthia, becoming extinct in France, II. 646.
Samia gloveri, food-plants of, in Montana, III. 335.
Samoa, *Aspidiotus destructor* intercepted on coconut from, III. 455; cacao pests in, II. 267, 555; coconut pests in, I. 393, II. 7, 26, 29, 270, 558, 690, 691; *Metarrhizium anisopliae* imported from, III. 754.
Samolus repens, *Asterolecanium stypheliae multiporum* on, in Australia, III. 548.
San José Scale (see *Aspidiotus perniciosus*).
San Thomé Borer, in Kamerun, III. 661.
sanborni, *Aphis*; *Macrosiphum*.
sanctae-luciae, *Eutermes*.
Sandalwood (see *Santalum*).
Sandwich Islands (see Hawaii).
sanguinatorius, *Ichneumon*.
sanguinea, *Coccinella*; *Cycloneda* (*Neda*); *Oligosita*.
sanguineum, *Callidium*.
sanguinolenta, *Cassida*; *Chrysomela*.
sanguisorbae, *Acaena*.
sanguisugus, *Conorrhinus*.
Sanninoidea (see *Aegeria*).
Santalum (Sandalwood), not attacked by *Pseudococcus filamentosus* in E. Africa, II. 146; borers of, in India, II. 151, III. 706.
Santalum acuminatum, *Cardiococcus foraminifera* on, in Australia, III. 652.
sansibaricus, *Temnorrhynchus*.
Saperda calcarata, on poplar, etc., in Canada, I. 407, 412, III. 584.
Saperda candida (Round-headed Apple Borer), in orchards in Canada, I. 404; in orchards in U.S.A., I. 280, 451, 467, III. 115, 179, 586, 671.
Saperda carcharias, on poplar in N. Italy, III. 124.

Saperda populnea, destroyed by *Picus major* in Germany, II. 148; on poplar in N. Italy, III. 124.
Saperda scalaris, on walnut in Russia, III. 206.
Saperda tridentata (Elm-tree Borer), in U.S.A., I. 116, 143.
Saperda vestita, on limes in U.S.A., II. 185.
Sapindus, extract of, as an adhesive in sprays, I. 238, II. 123, 588.
Sapindus saponaria, *Pseudococcus filamentosus* on, in E. Africa, II. 146.
Sapindus utilis, saponin extracted from, II. 123, 556.
Sapium (Maniçoba Rubber), pests of, in Brazil, II. 193.
Sapium janmani, pests of, in Br. Guiana, II. 417.
Sapodilla Plum (*Achras sapota*), *Anastrepha serpentina* on, in Brazil, III. 387; *Dacus* (*Bactrocera*) *ferrugineus* on, in Java, III. 4, 713; *Duomitus punctifer* on, in Barbados, III. 73.
Saponaria officinalis, addition of extract of, to lime-sulphur, III. 692.
Saponin, as an adhesive in sprays, II. 123, 556.
Saprinus virescens, said to destroy *Gastroidea polygoni* in Russia, III. 542.
Sapromyza, infested with *Empusa ovispora*, II. 376.
Saprosol, test of, against *Phylloxera*, I. 544, II. 518.
Saraca declinata, possibly original food-plant of *Acrocercops cramerella* in Java, III. 312.
sarasini, *Calotermes*.
Sarcina aurantiaca, in bees, I. 95.
Sarcina lutea, in bees, I. 95.
sarcitorius, *Ichneumon*.
Sarcocephalus esculentus, *Ceratitis giffardi* bred from, in Nigeria, I. 97.
Sarcophaga, infesting locusts in Russia, III. 636.
Sarcophaga affinis, parasite of locusts in Algeria, III. 428; parasite of Lepidoptera in Russia, I. 347, 362, 481, II. 222.
Sarcophaga albiceps, parasite of Lepidoptera in Russia, I. 481, II. 222.
Sarcophaga assidua, bionomics of, in U.S.A., III. 452.
Sarcophaga atropos (see *S. carnaria*).
Sarcophaga carnaria, parasite of locusts in Algeria, III. 428; in Europe, III. 452.
Sarcophaga cimbicis, parasite of grasshoppers in U.S.A., III. 82, 297.
Sarcophaga clathrata, parasite of locusts in Algeria, III. 428.
Sarcophaga cooleyi, bionomics of, in U.S.A., III. 452.
Sarcophaga cruentata, parasite of locusts in Algeria, III. 428.
Sarcophaga davidsoni, parasite of spiders in U.S.A., III. 452.
Sarcophaga erythrura, parasite of grasshoppers in U.S.A., III. 452.
Sarcophaga georgina, parasite of *Laphygma frugiperda* and grasshoppers in U.S.A., I. 518, III. 297.
Sarcophaga haemorrhoidalis, parasite of locusts in Algeria, III. 428; bionomics of, in U.S.A., III. 452.
Sarcophaga (*Helicobia*) *helicis*, parasite of grasshoppers, etc., in U.S.A., III. 82, 423, 452; parasite of *Vanessa californica* in U.S.A., I. 177.
Sarcophaga hunteri, parasite of grasshoppers in U.S.A., III. 82, 297, 452.
Sarcophaga incerta, bionomics of, in U.S.A., III. 452.
Sarcophaga kellyi, parasite of grasshoppers in U.S.A., III. 81, 82, 263, 297, 452; Chalcid parasites of, III. 151.
Sarcophaga lineata, parasite of locusts in Russia, etc., I. 535, II. 53, 718, III. 537.
Sarcophaga nurus (see *S. haemorrhoidalis*).
Sarcophaga sarraceniae, parasite of grasshoppers in U.S.A., III. 82, 452.
Sarcophaga sinuata, parasite of grasshoppers in U.S.A., III. 82.
Sarcophaga utilis, sp. n., parasite of *Allorrhina nitida* in U.S.A., III. 356.
Sarcophaga vericauda, parasite of *Plectrodera scalator* in U.S.A., III. 495.
sarcophagae, *Aphaereta*; *Eupteromalus*.
Sardinia, *Aeolothrips albicinctus* in, III. 566; *Anarsia lineatella* in, II. 419; *Cremastogaster scutellaris* on cork oak in, I. 221; locusts in, III. 497.
Sargus (*Macrosargus*) *cuprarius*, intercepted on azaleas from Belgium in U.S.A., III. 117.
Sarothamnus scoparius (Broom), *Lampides baetica* on, I. 411.
Sarothamnus vulgaris, *Sitones griseus* on, in Holland, III. 742.

sarraceniae, Sarcophaga.
Sarrothripus musculanus, III. 34; parasitised by *Trichogramma semblidis* in Russia, I. 432; on walnut in Turkestan, II. 419, 714.
Sarsaparilla, not attacked by *Lymantria dispar* in U.S.A., III. 669.
sartor, Monochamus.
sartus, Pachydissus.
Sassafras, *Cacoecia* (*Archips*) *argyrospila* on, in U.S.A., I. 225; somewhat resistant to gipsy moth, II. 711, III. 668.
satanas, Bracon.
satellitia, Eupsilia (*Scopelosoma*).
Saturnia, experiments with *Pimpla* spp. and, II. 214.
Saturnia pyri, on fruit trees in Russia, III. 46, 225, 610.
Saturnia spini, in Russia, III. 400.
saturniae, Scotia.
satyriniformis, Melittia.
Satyrus dryas (*phaedra*), on oats in France, III. 428.
saucia, Peridroma (*Agrotis*) (see *Lycophotia margaritosa*).
saundersi, Crossotarsus; *Phorocera.*
Sawfly Leaf-miner (see *Kaliosysphinga ulmi*).
Saw-toothed Grain Beetle (see *Silvanus surinamensis*).
saxatilis, Lygaeus.
saxeseni, Xyleborus (see *X. xylographus*).
Saxifraga peltata, Adoxus obscurus on, in California, I. 418, III. 16.
Saxifraga sarmentosa (Wandering Jew), not attacked by *Tetranychus telarius* in U.S.A., III. 64.
Sayornis phoebe, destroying insects in U.S.A., I. 226, 431, III. 739.
scaber, Eriophyes; *Porcellio.*
Scabiosa arvensis, Kakothrips robustus on, in Britain, III. 279.
scabiosae, Aphis; *Macrosiphum* (*Siphonophora*); *Zygaena.*
scabricollis, Lixus.
scabriusculus, Carabus.
Scaevola kōnigi, Eucalymnatus tessellatus on, in Seychelles, I. 129.
scalaris, Azygophleps; *Saperda*; *Stauroderus.*
scalator, Plectrodera.
Scale-insects, and their control in tropical Africa and Egypt, I. 11, 14, 49, 107, 121, 246, 258, 415, II. 1, 58, 59, 92, 103, 105, 106, 142, 146, 203, 276, 353, 410, 415, 422, 429, 447, 581, 591, 592, 605, 671, III. 125, 165, 166, 288, 432, 433, 547, 648, 663, 752; and their control in S. Africa, I. 321, II. 85, 298–300, 596, 612, 653, III. 502; and their control in Algeria, II. 349, III. 102; and their control in N. America, I. 48, 54, 55, 85, 91, 101, 133, 140, 168, 180, 218, 225, 264, 265, 280, 283, 307, 309, 324, 379, 383, 400, 401, 403, 405, 451, 475, 518, II. 3, 94, 114, 115, 117, 119, 184, 185, 203, 204, 216–218, 245, 247, 252, 378, 384, 386, 390, 434–437, 438, 460, 464, 492, 536, 542, 553, 585, 599, 600, 662, 673, 675, 677, 680, 706, 707, III. 16, 69, 84, 85, 117, 121, 137, 150, 161, 182, 192, 275, 326, 348, 354, 382, 407, 415, 417, 419, 422, 444, 445, 457, 494, 512, 513, 514, 552, 572, 584, 589, 618, 622, 623, 624, 625, 678, 687, 689, 708, 709, 734, 738, 758, 761; and their control in Tropical America, I. 20, 130, 138, 139, 157, 162, 322, 522, II. 206, 207, 416, 417, 477, 569, 628. 708, III. 135, 256, 303, 705; and their control in Australia, I. 136, II. 83, 427, 584, 652, 691, 705, III. 79, 126, 167, 364, 491, 503, 527, 548, 652, 653, 750; and their control in Europe, I. 99, 147, 167, 188, 189, 219, 221, 232, 243, 255, 278, 297, 320, 354, 358, 363, 373, 380, 460, 464, 472, 487, II. 43, 45, 86, 98, 101, 123, 128, 149, 165, 193, 268, 281, 292, 296, 343, 377, 397, 402, 441, 450, 515, 526, 563, 585, 609, 625, 628, 632, 650, 655, 700, 705, 715, 719, III. 5, 6, 11, 26, 41, 45, 81, 100, 101, 107, 112, 124, 143, 182, 201, 215, 223, 225, 251, 276, 346, 393, 396, 399, 430, 441, 496, 501, 524, 542, 606, 676, 740, 744, 747, 753, 763; and their control in Fiji, I. 136, II. 132, III. 548; and their control in Hawaii, I. 374, II. 20, III. 17, 170, 411, 492, 548, 739; and their control in India and Ceylon, I. 279, II. 191, 339, 427, 578, 583, 597, 643, 644, 649, III. 83, 146, 157, 168, 345, 489, 755; and their control in East Indies, I. 150, III. 316, 317–320, 646–648, 663; and their control in Japan, I. 63, 520, II. 243, III. 127, 546; in Madagascar, II. 92, 425; and their control in Mauritius and Réunion, II. 46, 216, 612, III. 160; and their control in New Zealand, III. 79, 158, 721; and their control in Palestine, II. 623; and their control in Philippines, I. 148, II. 243; and their control in Seychelles, I. 75, 129, 474, II. 269, 566, 567, III. 410, 731; and their control in

South Sea Islands, II. 3, 691; and their control in West Indies, I. 31, 76, 77, 83, 97, 185, 198, 251, 263, 329, 389, II. 31, 49, 78, 87, 143, 460, 533, III. 14, 22, 134, 476, 518, 583, 650; legislation and quarantine measures against, II. 83, 86, 186, III. 9, 71, 117, 175, 354, 364, 420, 469, 494, 513, 548, 558, 625, 657, 690, 739; new species of, I. 148, 150, 158, 162, 168, 258, 307, II. 92, 138, 203, 253, 308, 324, 346, 353, 410, 425, 427, 429, 585, 652, 705, III. 79, 127, 135, 167, 168, 303, 432, 433, 434, 503, 547, 548, 652, 653, 721, 750, 753, 755; natural enemies of, I. 3, 20, 63, 76, 81, 97, 101, 129, 145, 147, 150, 157, 160, 167, 171, 185, 189, 218, 229, 232, 263, 275, 278, 307, 309, 310, 320, 323, 343, 350, 363, 383, 390, 392, 427, 474, 511, 522, II. 20, 31, 49, 59, 78, 86, 88, 117, 124, 128, 129, 142, 143, 165, 190, 193, 203, 207, 217, 243, 245, 247, 271, 276, 288, 289, 292, 296, 384, 390, 397, 403, 416, 436, 437, 439, 441, 450, 477, 480, 492, 495, 520, 526, 554, 569, 592, 625, 644, 673, III. 5, 11, 14, 83, 85, 121, 130, 134, 143, 150, 160, 164, 165, 168, 174, 192, 247, 251, 256, 318, 348, 357, 417, 419, 433, 434, 457, 468, 473, 492, 493, 524, 542, 557, 690, 633, 647, 649, 675, 690, 724, 733, 736, 738, 740, 744, 752, 755, 757, 763; on cactus (Cochineal insects), I. 78–82, II. 440, 612, III. 126.

Scale, Apple Mussel (see *Lepidosaphes ulmi*).

Scale, Black (see *Saissetia oleae*).

Scale, Black Lime (see *Ischnaspis longirostris*).

Scale, Black Pine Needle (see *Aspidiotus californicus*).

Scale, Brown Apricot (see *Eulecanium armenaicum*).

Scale, Brown Elm (see *Eulecanium canadense*).

Scale, Brown Shield (see *Saissetia hemisphaericum*).

Scale, Burrowing (see *Howardia biclavis*).

Scale, California Red (see *Chrysomphalus aurantii*).

Scale, Chaff (see *Parlatoria pergandii*).

Scale, Cherry (see *Aulacaspis forbesi*).

Scale, Citrus Grey (see *Coccus citricola*).

Scale, Citrus Snow (see *Chionaspis citri*).

Scale, Coconut Snow (see *Diaspis boisduvali*).

Scale, Cottony Cushion (see *Icerya purchasi*).

Scale, Cottony Maple (see *Pulvinaria innumerabilis*).

Scale, English Walnut (see *Aspidiotus juglans-regiae*).

Scale, European Elm (see *Gossyparia spuria*).

Scale, European Fruit (see *Aspidiotus ostreaeformis*).

Scale, False Maple (see *Phenacoccus acericola*).

Scale, Felted Beech (see *Cryptococcus fagi*).

Scale, Fig (see *Ceroplastes rusci*).

Scale, Florida Wax (see *Ceroplastes floridensis*).

Scale, Fluted (see *Icerya purchasi*).

Scale, Fringed (see *Asterolecanium pustulans*).

Scale, Frosted (see *Eulecanium pruinosum*).

Scale, Glassy Star (see *Vinsonia stellifera*).

Scale, Grape (see *Aspidiotus uvae*).

Scale, Greedy (see *Aspidiotus rapax*).

Scale, Green (see *Coccus viridis*).

Scale, Grey (see *Targionia vitis*).

Scale, Indian Wax (see *Ceroplastes ceriferus*).

Scale, Long (see *Lepidosaphes gloveri*).

Scale, Mango Shield (see *Coccus mangiferae*).

Scale, Mulberry (see *Aulacaspis pentagona*).

Scale, Mussel (see *Lepidosaphes ulmi*).

Scale, Oak (see *Eulecanium quercifex*).

Scale, Oleander (see *Aspidiotus hederae*).

Scale, Orange (see *Chrysomphalus aurantii*).

Scale, Orange Mussel (see *Lepidosaphes beckii*).

Scale, Orange Snow (see *Chionaspis citri*).

Scale, Oyster-shell see *Lepidosaphes ulmi*).

Scale, Peach (see *Eulecanium persicae*).

Scale, Pear-tree Oyster (see *Aspidiotus ostreaeformis*).

Scale, Pernicious (see *Aspidiotus perniciosus*).

Scale, Pine Leaf (see *Chionaspis pinicola*).

Scale, Plum see *Eulecanium prunastri*).

Scale, Purple (see *Lepidosaphes beckii*).

Scale, Pustular Oak (see *Asterolecanium variolosum*).
Scale, Putman's (see *Aspidiotus ancylus*).
Scale, Red (see *Chrysomphalus aurantii*).
Scale, Red Orange (see *Chrysomphalus aurantii*).
Scale, Red-spotted (see *Chrysomphalus aonidum*).
Scale, Rose (see *Aulacaspis rosae*).
Scale, San José (see *Aspidiotus perniciosus*).
Scale, Scurfy (see *Chionaspis furfura*).
Scale, Soft (see *Coccus hesperidum*).
Scale, Soft Brown (see *Eulecanium capreae*).
Scale, Spruce Bud (see *Physokermes piceae*).
Scale, Star (see *Vinsonia stellifera*).
Scale, Sweet Birch (see *Chionaspis salicis-nigrae*).
Scale, Tanbark Oak (see *Aspidiotus densiflorae*).
Scale, Terrapin (see *Eulecanium nigrofasciatum*).
Scale, Tulip Tree (see *Toumeyella liriodendri*).
Scale, Wax (see *Ceroplastes* spp.).
Scale, West Indian Peach (see *Aulacaspis pentagona*).
Scale, West Indian Red (see *Selenaspidus articulatus*).
Scale, White (see *Chionaspis citri*).
Scale, Yam (see *Aspidiotus hartii*).
Scalecide, against *Cacoecia* (*Archips*) *argyrospila*, I. **425**; against Coccids, I. **452**, II. **86, 199, 299**; against *Eriosoma lanigerum*, III. **609**; against thrips, II. **188**.
Scalloped Hazel Moth (see *Odontoptera bidentata*).
Scalo, composition of, II. **697, 698**.
Scambus evetrivorus, sp. n., parasite of *Rhyacionia bushnelli* in U.S.A., III. **658**.
scandens, *Lycophotia* (*Carneades*).
Scapanes, on palms in New Guinea, II. **99**.
Scapanes australis, on coconut in South Sea Islands, II. **2**.
Scapanes grossepunctatus, on coconut in South Sea Islands, II. **2**.
Scapanus townsendi (Townsend's Mole), insectivorous habits of, III. **407**.
Scaphoideus, on willow in Maine, III. **530**.
Scapsipedus marginatus, on rubber in Kamerun, I. **349**, II. **415**.
Scapteriscus didactylus (West Indian Mole Cricket), bionomics and control of, in West Indies and Georgia, I. **103, 185, 324**, II. **48**, III. **471, 476, 516, 517, 585, 660**.
Scaptomyza flaveola, parasitised by *Dacnusa scaptomyzae* in U.S.A., I. **238**.
scaptomyzae, *Dacnusa*.
Scarabaeus sacer, attacked by *Lathrodectus tredecimguttatus* in Russia, III. **538**.
Scarabee (see *Euscepes batatae*).
Scatophaga merdaria, infested with *Empusa scatophagae*, II. **377**.
Scatophaga stercoraria, predaceous on *Hylemyia coarctata* in Russia, III. **640**.
Scelio australis, parasite of *Locusta australis* in Queensland, II. **17**.
Scelio ovi, parasite of *Locusta danica* in Queensland, II. **17**.
schachtii, *Heterodera*.
schalleriana, *Oxygrapha* (*Acalla*).
schayeri, *Calosoma*.
Schedius kuvanae, parasite of gipsy and brown-tail moths in U.S.A., II. **136, 295, 343**, III. **329, 330, 507**.
Scheele's Green (see Copper Arsenite).
Schilling's Mixture, formula for, I. **471**.
Schinus molle (Pepper Tree), *Anoplognathus analis* on, in Australia, III. **366**.
Schinus terebinthifolia, *Pulvinaria psidii* on, in Algeria, III. **173**.
schiödtei, *Chilocorus*.
schistacea, *Rapala*.
schistaceana, *Argyroploce* (*Cydia*, *Grapholitha*, *Olethreutes*).
Schistocerca, in California, III. **151**; on sugar-cane in Mexico, I. **184**; in Venezuela, III. **368**.
Schistocerca americana, *Coccobacillus* used against, in Mexico and Argentina, II. **461**; Sarcophagid parasites of, in U.S.A., III. **82**; on fruit in U.S.A., III. **181, 652**.
Schistocerca damnifica, on fruit in U.S.A., III. **181**.
Schistocerca pallens, on sugar-cane in Br. Guiana, I. **522**; in West Indies, III. **652**; *Coccobacillus acridiorum* and, I. **162**, II. **239**.
Schistocerca paranensis, bionomics and control of, in Trinidad, III. **618, 652, 679**; experiments with *Coccobacillus* and, II. **239**.
Schistocerca peregrina, on cotton, etc., in Africa, I. **149, 579**, II. I, **149, 579**, III. **503, 720**; control of, in Algeria, III. **24, 428**; in Anglo-Egyptian Sudan, II. **94, 95**; in Baluchistan, III. **461**; infected with *Coccobacillus* in Europe, II. **462**.
Schistocerca venusta, in California, II. **245**.

Schistoceros (*Apate*) *bimaculatum*, on vines in France, II. 196.
Schistodepressaria nervosa (see *Depressaria apicella*).
Schizomyia gennadii (see *Eumarschalia*).
Schizomyia pimpinellae, on parsnips in France, I. 505.
Schizoneura (see *Eriosoma*).
Schizonycha, on coffee in E. Africa, II. 570.
Schizonycha infantilis, in Rhodesia, III. 174.
Schizonycha puncticollis, in Rhodesia, III. 174.
Schizonycha serrata, on cotton in E. Africa, II. 1, 2.
schizopus, *Schizotetranychus*.
Schizostachium, *Asterolecanium miliaris longum* on, in Fiji, III. 548.
Schizotetranychus mytilaspidis (Citrus Red Spider), III. 253; in California and Florida, I. 240, 269, 325, II. 306, 553, III. 63, 327, 444, 493, 557, 622; in Ceylon, II. 306, 644; natural enemies of, I. 144, II. 553.
Schizotetranychus schizopus, III. 253.
Schizura (*Oedemasia*) *concinna* (Red-humped Apple Caterpillar), bionomics of, in N. America, I. 87, 136, 281, 417, 426, II. 116, 287, 496, 663, 675, 677, III. 493.
Schizura unicornis, on apples, etc., in Br. Columbia, I. 85.
schlectendali, *Phyllocoptes*.
Schleichera trijuga (Kusum Oil), effect of, on *Serinetha augur* in India, III. 755.
schmitti, *Eciton* (*Acamatus*).
Schoenobius bipunctifer (Paddy Stem-borer), on rice in India, II. 68, III. 144; on rice in Far East, I. 169, 519, II. 489.
schoeversi, *Aspidiotiphagus*.
schoutedeni, *Helopeltis*.
schreiberi, *Mylabris*.
schreineri, *Eurytoma*; *Phyllotreta*; *Pristomerus*.
schutzeella, *Dioryctria*.
schwarzi, *Zaglyptonotus*.
Schweinfurt Green (see Paris Green).
Sciadopitys (Umbrella Pine), pests intercepted on, in U.S.A., II. 186, III. 626.
Sciadopitys verticillata, *Pseudococcus ryani* intercepted on, from Japan, III. 455.
Sciaphilus squalidus (see *Sciaphobus*).
Sciaphobus squalidus, bionomics of, in Russia, I. 397, 460, 488, II. 42, 337–339, 366, 395, III. 47, 106, 225, 226, 393, 397, 402, 442, 539, 601.
Sciapteron maroccanus, on poplars in Russia, I. 460.
Sciapteron regale, intercepted on vines from Yokohama, II. 113.
Sciapteron tabaniforme (see *Paranthrene*).
Sciara, on *Trifolium pratense* in Britain, I. 242; in Montana, III. 335; Dipterous parasite of, III. 466; predaceous on *Mayetiola destructor*, II. 225; on narcissus bulbs, II. 89.
Scilla nutans (Wild Hyacinth), *Merodon equestris* on, II. 88.
scintillans, *Euproctis*.
Sciopithes obscurus, on fruit trees in Oregon, III. 271.
Scirpophaga albinella, on rice in Br. Guiana, II. 568.
Scirpophaga auriflua (see *S. xanthogastrella*).
Scirpophaga excerptalis, on sugar-cane in India, I. 169.
Scirpophaga intacta (White Tip Borer), bionomics of, on sugar-cane in Java, III. 383.
Scirpophaga monostigma, on sugar-cane in India and Java, I. 170.
Scirpophaga xanthogastrella (*auriflua*), on sugar-cane in Far East, I. 170, II. 490.
Scirpus, *Diabrotica duodecimpunctata* on, in U.S.A., I. 430.
Scirpus lacustris, *Sphenophorus discolor* on, in California, I. 383.
scirpus, *Saltusaphis*.
Scirtothrips citri (Citrus Thrips, Orange Thrips), bionomics and control of, in U.S.A., I. 179, II. 271, 438, 554, III. 512, 557, 585, 622.
Scirtothrips signipennis, sp. n., on banana in Ceylon, II. 193.
scitella, *Leucoptera* (*Cemiostoma*).
scitula, *Eublemma* (*Thalpochares*).
Sciulus, predaceous on *Tenuipalpus banksi* in U.S.A., III. 306.
Sclerotinia fuckeliana, on vine in Bessarabia, III. 226.
Sclerotinia sclerotiorum, in Britain, I. 242.
sclopetaria, *Epeira*.
Scobicia pustulata, *Monolexis lavagnei* associated with, in France, II. 9.
Scolia campestris, destroying *Atta cephalotes* in Brazil, I. 42.
Scolia carnifex, parasitic on *Oryctes rhinoceros*, II. 28.
Scolia oryctophaga, parasitic on *Oryctes rhinoceros*, II. 28.
Scolia punctata, parasitic on bees, I. 42.
Scolia quadripunctata, parasitic on *Anisoplia austriaca* and *Oxythyrea stictica* in Russia, II. 260.

Scolia rufa, parasitic on *Oryctes* in Mauritius, II. 46.
Scolimus esculentum, *Dociostaurus maroccanus* on, in Sicily, III. 39.
Scoliopteryx libatrix, in Russia, III. 400.
Scolopostethus affinis, food-plants of, in Russia, III. 479.
Scolothrips sexmaculatus, predaceous on *Tetranychus* in U.S.A. and Russia, I. 144, 353, II. 267, 313, 704.
Scolytoplatypus brahma, on mahogany in India, I. 351.
Scolytus, in Germany, II. 563; in Russia, III. 48, 50, 311.
Scolytus amygdali, in almond in Italy, III. 431; in almond in Spain, III. 276.
Scolytus (*Eccoptogaster*) *carpini*, in Russian forests, III. 228.
Scolytus destructor, in forest trees in Britain, I. 464.
Scolytus fasciatus, in Russia, II. 714.
Scolytus geoffroyi, in walnut in Germany, I. 150.
Scolytus mali, bionomics of, in fruit-trees in Russia, II. 51.
Scolytus pruni, bionomics of, in Germany, I. 259, 340, II. 485, 499; in plum in Italy, III. 431; in fruit trees in Russia, III. 51, 222, 393, 399; in orchards in Switzerland, III. 436.
Scolytus quadrispinosus (Hickory Bark Beetle), bionomics and control of, in U.S.A., I. 342, 528, II. 183, III. 87, 193, 373, 474, 559, 587, 673.
Scolytus (*Eccoptogaster*) *ratzeburgi*, control of, in birch in Russia, III. 223.
Scolytus rugulosus (Fruit-tree Bark Beetle), in Argentina, II. 164; in Canada, II. 25, 432; in Germany, I. 259, 340, II. 486, 499; in cherry in Holland, III. 743; in peach in Italy, III. 124, 431; in Russia, I. 460, 536, II. 51, 428, 700, 714, III. 51, 222, 393, 399, 605; in orchards in Switzerland, III. 436; in U.S.A., I. 280, 426, 475, III. 85, 193, 515, 738.
Scolytus unispinosus, in Douglas fir in U.S.A., III. 670.
Scopelosoma satellitia (see *Eupsilia*).
Scorpions, Sarcophagid parasites of, in Java and Sumatra, III. 452.
scorzonerae, *Aulax*.
Scotia saturniae, parasite of *Lymantria dispar*, I. 362, 481.
Scotland (see British Isles).
Scotogramma trifolii (*Mamestra chenopodii*), bionomics of, in Canada, III. 629; on salsify, etc., in France, I. 504, II. 270; in Russia, I. 490, 499, III. 400, 403, 639; on beet, etc., in U.S.A., I. 352, III. 178.
Scotorythra, parasitised by *Henicospilus* spp. in Hawaii, III. 682.
Scots Pine (see *Pinus sylvestris*).
Screwpine (see *Pandanus*).
scripta, *Melasoma* (*Lina*); *Sphaerophoria* (*Melithreptus*).
Scrophularia canina, food-plant of *Aulacaspis pentagona*, I. 222.
scrophulariae, *Anthrenus*; *Cionus*.
Scrub Pine (see *Pinus rigida*).
scrupeus, *Paracalocoris*.
scrutator, *Athous niger*; *Bracon*; *Calosoma*.
Scudderia curvicauda, on fruit in U.S.A., III. 181.
Scudderia furcata, bionomics of, in California, III. 653, 654.
Scudderia furcifera, in California, III. 151.
Scudderia pistillata, on fruit in U.S.A., III. 181.
Scudderia texana, on fruit in Missouri, III. 181.
sculpticauda, *Barythrips*.
Scurfy Scale (see *Chionaspis furfura*).
Scurvy Pea (see *Psoralea argophylla*).
Scutare fimbriata, sp. n., in New Zealand, III. 721.
scutellare, *Xanthogramma*.
scutellaris, *Aphelinus* (*Bracon*, *Coccobius*); *Coccophagus*; *Cremastogaster*.
scutellata, *Agromyza*; *Sturmia*.
scutellator, *Ichneumon*.
scutellatus, *Monochamus* (*Monohammus*); *Notopygus*.
Scutellista, parasite of *Saissetia oleae* in California, II. 554.
Scutellista cyanea, parasite of *Saissetia oleae*, I. 167, 427, II. 191, 707, III. 143, 419; parasite of *Ceroplastes rusci* in France, III. 11; imported into Hawaii, III. 757.
Scutellista cyanea var. *obscurata*, parasite of *Saissetia oleae* in Eritrea, III. 432.
Scymnus, parasitised by *Syntomosphyrum taprobanes* in Ceylon, III. 443; predaceous on other insects, I. 508, II. 142, 227, 619, III. 318, 598.
Scymnus ater, predaceous on *Taeniothrips pyri* in U.S.A., III. 463.
Scymnus bipunctatus, predaceous on *Pseudococcus* spp., III. 121, 150, 648.

Scymnus guttulatus, predaceous on mealy bugs in California, II. 436.
Scymnus horni, predaceous on *Dactylopius confusus* in U.S.A., I. 81.
Scymnus intrusus, predaceous on *Pseudococcus sacchari* in Costa Rica, I. 20.
Scymnus loewii, predaceous on *Sipha graminis* in Porto Rico, I. 185, II. 49, III. 674; predaceous on *Dactylopius confusus* in U.S.A., I. 81; introduced into Hawaii, III. 757.
Scymnus marginicollis, predaceous on *Tetranychus telarius* (*bimaculatus*) in California, I. 240; predaceous on scale-insects in California, II. 436, III. 422.
Scymnus nanus, predaceous on *Tetranychus telarius* (*bimaculatus*) in California, I. 240.
Scymnus nebulosus, predaceous on scale-insects in California, II. 436.
Scymnus notescens, introduced into Hawaii, III. 757.
Scymnus plebeius, predaceous on Aphids in French Sudan, II. 396, 631.
Scymnus punctillus, predaceous on *Tetranychus telarius* in Russia, II. 313.
Scymnus punctum (see *Stethorus*).
Scymnus roseicollis, predaceous on Aphids in Porto Rico, I. 185, II. 49, III. 134, 674.
Scymnus rotundatus, predaceous on *Pseudococcus adonidum* in Réunion, II. 216.
Scymnus sordidus, predaceous on mealy bugs, etc., in California, II. 436.
Scymnus vividus, in bait-traps for *Ceratitis capitata*, III. 568.
Scythropia crataegella (Hawthorn Moth), on apple in Sweden, III. 250.
Seaweed, as an adhesive in insecticides, II. 335.
Secale, *Aphis avenae* on, in U.S.A., II. 696.
secalis, *Trachea* (*Hadena*).
Secodella, parasite of *Argyresthia alternatella* in U.S.A., III. 581.
Secodella acrobasis, sp. n., parasite of *Mineola indiginella* in U.S.A., III. 691.
Secodella cushmani, sp. n., parasite of *Polychrosis viteana* in U.S.A., III. 691.
Secodella rugosa, sp. n., in U.S.A., III. 691.
Secodella viridis, sp. n., in U.S.A., III. 691.
secreta, *Odonaspis* (*Aspidiotus*).
securis, *Psalis* (*Dasychira*).
secundus, *Psyllodontus*.
Sedge (*Carex*), *Saltusaphis scirpus* on, in Egypt, III. 749; *Pseudococcus sexaspinus* on, in New Zealand, III. 721.
sedi, *Aphis*.
Sedum acre, *Aphis sedi* on, in England, III. 633.
segetis, *Agriotes* (*Elater*).
segetum, *Anisoplia*; *Euxoa* (*Agrotis*).
segregatus, *Dendrolimus*.
Sehirus bicolor, in orchards in Russia, III. 45, 393.
Sehirus luctuosus, in Russia, III. 727.
Sehirus sexmaculatus, food-plants of, in Russia, III. 479.
Seira nigromaculata, on *Pinus sylvestris* in Britain, I. 333.
Seius pomi, predaceous on spinning mites in U.S.A., III. 64, 362.
Selandria adumbrata (see *Eriocampoides limacina*).
Selandria bipunctata (see *Ardis*).
Selandria cerasi (see *Eriocampoides limacina*).
Selandria fulvicornis (see *Hoplocampa*).
Selandria morio, on bush fruit in U.S.A., III. 481.
selecta, *Ptychomyia*.
Selenacus turneri, sp. n., in Tasmania, III. 361.
Selenaspidus (*Pseudaonidia*) *articulatus* (West Indian Red Scale), on olive in Africa, III. 432; on dates, rubber, etc., in E. Africa and Uganda, I. 415, II. 591, III. 752; on citrus and coffee in Br. Guiana, II. 417, 569; intercepted on various plants in California, III. 455, 495; food-plants of, in Peru, III. 135; on citrus in West Indies, I. 251, II. 78; parasitised by *Aphelinus quaylei*, sp. n., III. 357.
Selenothrips rubrocinctus (see *Heliothrips*).
sellatus, *Paraptochus*.
Semanopterus depressiusculus, in Queensland, III. 491.
Semasia prunivora (see *Enarmonia*), I. 26.
semblidis, *Trichogramma* (*Oophthora*, *Pentarthron*).
Semblis lutaria, parasitised by *Trichogramma semblidis* in Sweden, I. 431.
semiaurea, *Pseudobrachysticha*.
semifascia, *Earias* (see *E. insulana*).
semiflavidus, *Anastatus*.
semiflavus, *Podothrips*.
semifumatum, *Trichogramma*.

semifuneralis, Euzophera.
semifuscipennis albipes, Aphelinoidea.
semigranosus, Xyleborus.
semilaeve, Calosoma.
seminationis, Andricus.
seminitidus, Blosyrus.
seminotus, Physcus.
semiopacus, Xyleborus.
Semiothisa (*Macaria*) *liturata*, in Russia, III. 48.
semistriatus, Telenomus.
Semi-tropical Army Worm (see *Xylomyges eridania*).
semmelinki, Trichogomphus.
Semnoprepia, parasitised by *Eupelmus* spp. in Hawaii, III. 681.
senatoria, Anisota.
Senecio, Pseudococcus spp. on, in California, II. 247, 435.
Senecio bellidioides, Deilemera annulata on, in New Zealand, III. 721.
Senecio jacobaea, Crambus caliginosellus on, in Virginia, II. 525.
Senecio scandens, Deilemera annulata on, in New Zealand, III. 721.
Senecio vulgaris, Aphis apposita on, in Britain, III. 762; *Deilemera annulata* on, in New Zealand, III. 721.
senecionis, Nysius.
seniculus, Apion.
Senegal, *Apate monacha* in, II. 196; fruit-flies and their parasites in, I. 91, II. 316; new Hymenopterous parasites from, II. 288, 346; pests of groundnuts in, II. 549, III. 726; scale-insects from, II. 354, 425; termites from, II. 610.
senegalensis, Diaspis.
Senna Bean, *Dichocrocis punctiferalis* on, in Queensland, II. 20.
sepia, Chortophila.
septemdecim, Tibicen (*Cicada*).
septemfasciata, Cyrtacanthacris (*Acridium*).
septempunctata, Chrysopa; *Coccinella.*
septentrionalis, Croesus (*Nematus*).
sequax, Wagneria (*Phorichaeta*).
Sequoia sempervirens (see Redwood).
Sequoia Pitch Moth (see *Vespamima sequoiae*).
sequoiae, Vespamima.
Serangium giffardi, predaceous on Aleurodids in Nigeria and Kamerun, II. 348, III. 433.
Serbia, *Psylliodes attenuata* in, I. 342.
serene, Dictyopharina.
Serica, on sugar-cane in Mauritius, I. 31.
Serica alternata, on fruit-trees in California, II. 663, III. 625.
Serica anthracina, food-plants of, in California, I. 384.
Serica assamensis, on tea in India, III. 488.
Serica brunnea, in Russia, II. 110.
Serica japonica, intercepted in Hawaii on plants from Japan, III. 289.
sericans, Irbesia.
sericatus, Heterothrips.
sericea, Glyphodes.
sericeus, Metamasius (*Sphenophorus*); *Pezomachus*; *Polydrosus.*
Sericosomus, habits of, in U.S.A., III. 299.
Sericulture (see Silkworms).
serieventris, Podisus.
Serinetha hexophthalma, on cotton in E. Africa, I. 246, 415, II. 581.
serinopa, Nephantis.
Serpentine Leaf-miner (see *Agromyza* spp.).
serpentina, Anastrepha.
serrata, Atelocera; *Ctenochiton*; *Schizonycha.*
serratilobis, Eriococcus.
serratus, Henoticus; *Paragus.*
serricorne, Lasioderma.
Service Berry (see *Amelanchier canadensis*).
Service Tree (*Pyrus sorbus*), pests of, in Canada and U.S.A., I. 208, II. 94, III. 115, 586; pests of, in Russia, II. 220, 337, III. 204, 310, 535, 610.
Sesamia calamistis, on maize in Zanzibar, III. 125; on maize in Nigeria, III. 166.
Sesamia cretica, on maize in Egypt, I. 501.
Sesamia fusca (see *Busseola*).
Sesamia inferens, on rice, etc., in India and Far East, I. 169, 320, II. 68, 215, 489.
Sesamia nonagrioides (see *S. vuteria*).
Sesamia vuteria (Yellow Stalk Borer) on maize in S. Africa, II. 299; on maize in Algeria, I. 43; bionomics of, on sugar-cane, etc., in Mauritius, I. 31, II. 612, III. 160, 730, 756; on maize in Portugal, I. 313.
Sesamia uniformis, on sugar-cane, etc., in India, I. 169.
sesamiae, Stenopleura.
Sesamum, pests of, in E. Africa, I. 414.
Sesamum indicum (Gingelly), *Phricodus hystrix* on, I. 526.
Sesamum orientale, Epilachna chrysomelina on, in E. Africa, I. 246.
Sesbania aculeata, Prodenia litura on, in Philippines, I. 482.
Sesbania aegyptica, Prodenia litura on, in Philippines, I. 482.

Sesia (see *Aegeria*).
Sessinia (*Ananca*) *collaris*, on coconut in South Sea Islands, II. 2.
Sessinia livida, on coconut in South Sea Islands, II. 2.
Sessinia palmarum, on coconut in South Sea Islands, II. 2.
Setaria, *Aphis maidiradicis* on, in Illinois, I. 124; pests of, in Russia, III. 110, 600.
Setaria italica, *Fatua* on, in Madras, III. 677; *Phyllotreta vittula* on, in Russia, I. 487.
Setaria verticillata, *Cirphis loreyi* on, in Rhodesia, III. 360.
Setaria viridis, *Pyrausta nubilalis* on, in France, I. 409; *Phlyctaenodes sticticalis* on, in Russia, I. 360.
setariae, *Aphis*; *Pentaphis*; *Tychea*.
seticornis, *Adelphocoris*.
Setomorpha insectella, damaging maize and stored cotton seed in E. Africa, I. 415, II. 580.
Setora nitens, on banana and coffee in Far East, II. 490; parasites of, in Java, III. 312.
setulosus, *Mimetus*.
severini, *Euhallidaya*.
sexaspinus, *Pseudococcus*.
sexcincta, *Elis* (*Myzine*).
sexdecimpunctata, *Mylabris*.
sexdens, *Atta*.
sexdentatum, *Sinoxylon* (*Apate*).
sexdentatus, *Ips*.
sexmaculata, *Mylabris*.
sexmaculatus, *Chilomenes*; *Scolothrips*; *Sehirus*; *Tetranychus* (see *T. telarius*).
sexnotata, *Cicadula* (*Jassus*).
sexpunctalis, *Entephria*.
sexspinosus, *Eccoptopterus* (*Eurydactylus*).
sexta, *Protoparce* (*Phlegethontius*).
seychellarum, *Icerya*.
Seychelles, insect pests in, I. 75, 129, 424, 473, 474, II. 269, 566, 567, III. 167, 410, 626.
Shadbush (see *Amelanchier canadensis*).
Shalot, *Anthomyia* spp. on, I. 256, 386; *Eumerus strigatus* and *Merodon equestris* on, II. 89.
Sharp-headed Grain Leaf-hopper (see *Draeculacephala mollipes*).
Shasta Daisy, *Estigmene acraea* on, in California, III. 85.
Sheep-dip, not recommended against termites, III. 751.
Sheep Sorrel (*Rumex acetosella*), *Crambus caliginosellus* on, in Virginia, II. 525.
Shepherd's Purse (see *Capsella bursa-pastoris*).
Shepherdia, *Rhopalosiphum hippophaes* on, in Colorado, III. 351.
Shield Scale Fungus (see *Cephalosporium lecanii*).
Shining Cockchafer (see *Anoplognathus analis*).
Shisham, *Sinoxylon anale* on, in India, III. 723.
Shoestring Fungus (see *Armillaria mellea*).
Shorea, attacked by *Coptotermes gestroi* in Java, I. 355.
Shorea robusta (Sal), pests of, in India, I. 381, III. 154, 722.
Short-beaked Clover Aphis (see *Aphis bakeri*).
Short-leaf Pine (see *Pinus echinata*).
Short-siphoned Mangel Aphis (see *Aphis brevisiphona*).
shoshoneanorum, *Chelonus*.
Shot-hole Borers (see *Scolytus* and *Xyleborus*).
Shot-hole Borer of Tea (see *Xyleborus fornicatus*).
Shrike, destroying noxious insects, II. 222, III. 297.
siaelandicus, *Corymbites*.
Sialia currucoides, destroying insects in U.S.A., III. 377.
Sialia mexicana, destroying insects in U.S.A., III. 377.
Sialia sialis, destroying insects in N. America, I. 226, II. 307, III. 377.
siamica, *Coptosoma*.
Siberia, *Dendrolimus pini* and *D. segregatus* in forests in, II. 220; insect pests in, I. 342, 359, 459, II. 37, 125, 177, 198, 220, 257, 290, 356, 465, 613, 669, 701; III. 103, 130, 131, 185; control of locusts in, I. 459, II. 521, III. 103, 111, 338, 536; nosematosis among bees in, III. 152; need for an Entomological Station in, III. 219.
Siberian Cedar (see *Pinus cembra*).
Siberian Oil Seed (see *Camelina sativa*).
Siberian Pea-tree (see *Caragana arborescens*).
Sibine stimulea, parasitised by *Apanteles sibinidis* in U.S.A., III. 658.
Sibine trimacula, on coconut in Br. Guiana, II. 569.
Sibinia, on lucerne in Europe, I. 527.
Sibinia peruana, on cotton in Peru, III. 273.
sibinidis, *Apanteles*.
sibirica, *Aelia*; *Epicauta*; *Mylabris*.
sibiricus, *Chermes* (*Pineus*); *Gomphocerus*.
sicarius, *Tetrastichus*.
siccifolia, *Cyclopelta*.

sicelis, Geotrogus (*Rhizotrogus*).
Sicily, insect pests in, I. **35, 172, 278, 320, 392, 468,** II. **45, 149, 150, 253, 328,** III. **33, 54, 112, 143**; new Chalcids from, III. **633**; pests of flax in, III. **714**; *Leptomastix* from, imported into California, III. **557**; lime-sulphur sprays in, II. **477**; control of locusts in, III. **39, 497.**
sicula, Anomala ausonia.
Sida carpinifolia, Earias biplaga on, in Nigeria, III. **164.**
sidae, Dysdercus.
Sidemia (*Hadena*) *devastatrix*, bionomics of, in Canada, III. **70, 551, 629.**
Sideridis albipuncta, caught in molasses troughs in Russia, III. **639.**
Siderodactylus, on cotton in Nigeria, II. **106.**
Sierola flavocollaris, parasite of *Aristotelia elegantior* in Hawaii, III. **681.**
Sierola molokaiensis, parasite of *Ereunetis flavistriata* in Hawaii, III. **681.**
Sierra Leone, *Ceratitis tritea* originally described from, I. **97**; *Dysdercus superstitiosus* in, I. **92**; *Melisomimas metallica* on *Albizzia* in, III. **168.**
sierricola, Bixadus; *Metisa.*
Sigalphus daci, sp. n., parasite of *Dacus oleae* in Eritrea, III. **173, 433.**
Sigalphus flavipalpis, parasite of *Acidia heraclei* in France, III. **188.**
signata, Cyclocephala; *Hyperaspis*; *Phytometra* (*Plusia*); *Porina.*
signaticollis, Rhynchophorus (see *R. ferrugineus*).
signaticornis, Medeterus.
signatus, Anthonomus; *Homotripus.*
signifera, Coptocycla.
signipennis, Scirtothrips.
Signiphora giraulti, sp. n., parasite of *Dactylopius citri* in Trinidad, II. **288.**
Signiphora lutea, parasite of scale-insects in Peru, I. **157, 323.**
Signiphora nigrita, parasite of *Aspidiotus perniciosus* in U.S.A., II. **385.**
Signiphora occidentalis, parasite of *Hemichionaspis minor* in Peru, I. **323.**
silacealis, Botys (see *Pyrausta nubilalis*).
Silene, destruction of, to control *Pegomyia hyoscyami*, III. **608.**
Silene inflata (Bladder Campion), vine moths on, in France and Russia, I. **71,** III. **210.**
silenus, Phyllognathus.
siliquana, Earias (see *E. insulana*).
Silk-cotton Tree (see *Eriodendron anfractuosum*).
Silk Oak (see *Grevillea robusta*).
Silkworms (*Bombyx mori*), I. **286, 306, 345, 509,** II. **105, 199, 528, 670.**
Silkworms, African, I. **33,** II. **530, 547**; in Madagascar, I. **286.**
Silkworms, Eri (*Attacus ricini*), in Madras, II. **140.**
Silpha atrata, on sugar-beet in Germany, II. **500**; on beet in Holland, I. **385**; destroyed by rooks in Russia, III. **341.**
Silpha obscura, destroyed by rooks in Russia, III. **341.**
Silpha opaca, on beet in France, I. **227**; on sugar-beet in Denmark, III. **246, 698.**
Silpha ramosa, in California, III. **85.**
silphoides, Leptosonyx.
Silvanus frumentarius (see *S. surinamensis*).
Silvanus surinamensis (Saw-toothed Grain Beetle), on cotton in Africa, I. **414,** II. **2, 579**; on grain, etc., in Russia, II. **40,** III. **46, 207**; on ground-nuts in Senegal, II. **549**; control of, in Tasmania, III. **409**; damaging stored cereals, etc., in U.S.A., I. **115, 152,** II. **93, 382, 703,** III. **262, 575**; infesting biscuits, I. **292.**
Silver Fir (see *Abies pectinata*).
Silverfish (see *Lepisma saccharina*).
Silver Maple (see *Acer saccharinum*).
Silver Mite (see *Eriophyes oleivorus*).
Silver Poplar, *Phyllorycter* (*Lithocolletis*) *populifoliella* on, in Russia, II. **443.**
silvestrii, Argopistes; *Ceratitis*; *Dinaspis*; *Dirhinus*; *Galesus*; *Howardia*; *Ischnaspis*; *Pseudobracon.*
Simaethis (see *Hemerophila*).
similalis, Phlyctaenodes.
similiella, Paltodora.
similis, Chelonus; *Chermes*; *Chilocorus*; *Diprion* (see *Lophyrus pini*); *Epilachna*; *Eriophyes*; *Porthesia*; *Philotrypesis*; *Tettigonia*; *Tylenchus.*
simillima, Earias (see *E. insulana*).
simoni, Telenomus; *Trissolcus.*
Simplemphytus pacificus, sp. n., on cherry in Oregon, III. **77, 260.**
simplex, Anabrus; *Aonidia*; *Chilo*; *Chionaspis*; *Dendroctonus*; *Gonocephalum*; *Lissorhoptrus*; *Paratetranychus* (*Tetranychus*); *Pyroderces*; *Tipula.*

simplicia, *Pundaluoya* (see *Peregrinus maidis*).
simulans, *Episilia* (*Agrotis*).
Simulium, in U.S.A., I. 54.
Sinapis arvensis (see Mustard).
Sinapis juncea, in Astrachan, III. 637.
sinensis, *Bruchus* (see *B. chinensis*); *Tenodera*; *Thosea*.
Singapore, *Acythopeus aterrimus* on orchids in, I. 36; coconut pests in, I. 158, 217, II. 7, 583; yam pests in, III. 723, 724.
singoriensis, *Trochosa*.
singularis, *Otiorrhynchus*; *Sahlbergella*.
sinithiae, *Melanoxantherium*.
Sinoxylon anale, on shisham in India, III. 723.
Sinoxylon muricatum (see *S. perforans*).
Sinoxylon perforans (*Apate muricata*) on osiers in Germany, II. 643; bionomics of, on vines in France, II. 196.
Sinoxylon (*Apate*) *sexdentatum*, bionomics of, on vines and figs in France, II. 9, 196, III. 10.
sinuata, *Agallia*; *Apate* (see *Xylonites retusus*); *Pachnoda*; *Phyllotreta*; *Sarcophaga*.
Sinuate Pear Borer (see *Agrilus sinuatus*).
sinuatus, *Agrilus*; *Hister*; *Thanatophilus*.
Sipalus hypocrita, on *Bombax malabaricum* in China, III. 723; on rubber in Ceylon, II. 644.
Sipha, on beet, etc., in Russia, I. 357, 460.
Sipha flava, bionomics of, on sugar-cane in Porto Rico, III. 134, 674.
Sipha graminis (Sugar-cane Aphis), on oats in France, III. 428; natural enemies of, in Porto Rico, I. 185, II. 49.
Sipha maidis, on grain in Russia, II. 171.
Siphanta acuta, in bait-traps for *Ceratitis capitata*, III. 568.
Siphocoryne artemisiae, on *Artemisia campestris* in Italy, III. 54.
Siphocoryne avenae (see *Aphis*).
Siphocoryne capreae (see *Cavariella*).
Siphocoryne nymphaeae (see *Rhopalosiphum*).
Siphocoryne saliceti, II. 406.
Siphocoryne splendens, sp. n., on wheat in Egypt, III. 749.
Siphona cristata (see *Bucentes*).
Siphona plusiae, parasite of *Phryganidia californica* in California, III. 306.
siphonini, *Encarsia*.
Siphoninus finitimus, sp n., bionomics of, on olive in Africa, III. 432, 433.
Siphonophora caraganae (see *Acyrthosiphon*).
Siphonophora cerealis (see *Macrosiphum granarium*).
Siphonophora leptadeniae (see *Macrosiphum*).
Siphonophora ononis (see *Acyrthosiphon pisi*).
Siphonophora pisi (see *Acyrthosiphon*).
Siphonophora rosae (see *Macrosiphum*).
Siphonophora rosarum (see *Macrosiphum*).
Siphonophora scabiosae (see *Macrosiphum*).
Siphonophora ulmariae (see *Acyrthosiphon pisi*).
Sirenia Oil, effect of, on plants, III. 370.
Sirex, in N. America, I. 255; in sandalwood in India, III. 706.
Sirex gigas, in forest trees in Britain, I. 120, 464; introduced into Réunion from Europe, II. 215.
Sirex juvencus, in forest trees in Britain, I. 464.
Sirex noctilio, in larches in Britain, I. 120.
Siris acacia, *Taragama dorsalis* on, in Ceylon, III. 61.
siro, *Tyroglyphus*.
Sisal (*Agave sisalina*), pests of, in E. Africa, I. 414, 415, II. 128, 146, III. 124; *Pseudococcus* intercepted on, in California, III. 494.
sissu, *Apoderus*.
sisymbrii, *Rhopalosiphum*.
Sisymbrium arnottianum, *Rhopalosiphum sisymbrii* on, in Argentina, III. 55.
Sisymbrium losselii, not attacked by *Phlyctaenodes sticticalis* in Russia, II. 44.
Sisymbrium sophia, pests on, in Russia, II. 44, III. 543.
Sisyropa, parasite of *Diacrisia maculosa* in Nigeria, II. 107.
Sitka Spruce (see *Picea sitchensis*).
Sitodiplosis mosellana (*Cecidomyia aurantiaca*), on grain crops in Denmark, III. 246, 698; in Holland, III. 199.
Sitodrepa (*Anobium*) *panicea*, damaging biscuits, I. 292, III. 677; in stored grain in Russia, II. 40, 503, III. 402.
Sitona (see *Sitones*).
Sitones, on *Trifolium pratense* in Britain, I. 242; on peas, etc., in Russia, II. 340, III. 205, 443, 480, 641.

Sitones crinitus, on clover, etc., in Russia, III. 398, 481.
Sitones griseus, on lucerne in Europe, I. 527; food-plants of, in Holland, III. 742.
Sitones hispidulus (Clover Root Weevil), on lucerne in Russia, III. 47; bionomics of, on clover, etc., in U.S.A., III. 380,406, 709.
Sitones humeralis, on lucerne in Italy, II. 181; on lucerne in Russia, II. 395, III. 47.
Sitones lineatus, on clover, etc., in Denmark, III. 246, 247, 526, 698; bionomics of, on vetches, etc., in Germany, II. 500, III. 102; on beans in Holland, III. 198; bionomics of, on lucerne in Russia, I. 214, 485, 487, 527, II. 370, 371, 395, III. 51, 106, 107, 112, 393, 398, 485, 610.
Sitones lineellus, on lucerne in Europe, I. 527.
Sitones longulus, on lucerne in Russia, II. 716, III. 47.
Sitones sulcifrons, on lucerne in Russia, I. 527, III. 398, 481.
Sitones tibialis, on lucerne in Russia, I. 527, III. 481.
Sitophilus granarius (see *Calandra*).
Sitotroga cerealella (Angoumois Grain Moth), in E. Africa, I. 247, 415, II. 283; in Algeria, II. 231; in Britain, II. 285, 497; declared a pest in Br. Columbia, I. 48; on maize in New South Wales, III. 24; in Nyasaland, II. 117; in Russia, II. 33, 40, 502, III. 220; control of, in stored grain in Canada and U.S.A., I. 114, 275, II. 382, III. 175, 262, 381, 451, 566, 708; not infesting army biscuits, I. 293.
Sitta uralensis, destroying *Dendrolimus segregatus* in Russia, II. 223.
siva, Taragama.
siwalikensis, Sphaerotrypes.
sjöstedti, Stictococcus.
skriabini, Acyrthosiphon.
Skunk, destroying noxious insects, II. 121, 204, III. 249, 297, 368, 371.
Skunk Cabbage (*Symplocarpus foetidus*), not attacked by *Lymantria dispar* in U.S.A., III. 669.
slingerlandana, Thymaris.
Sloe (see *Prunus spinosa*).
slossonae, Xenoschesis.
Slow-worm (*Anguis fragilis*), II. 326.
Small Moth Borers of sugar-cane (see *Diatraea* spp.).
smaragdina, Oecophylla.
smaragdinus, Pachylarthrus.
Smartweed (see *Polygonum*).
Smerinthus populi (see *Amorpha*).
Smicra albifrons (see *Spilochalcis*).
Smicronyx fulvus, bionomics of, on sunflower in Colorado, III. 753.
Smilax rotundifolia, Trachea turbulenta on, in Connecticut, III. 372.
Smilia misella (see *Microweisia*).
smithi, Diadiplosis; Phytalus.
Smynthurus (Springtail), bionomics of, on Cucurbitaceous plants in Virginia, III. 89.
Smyrna, *Novius cardinalis* in, II. 189.
Snail, parasitised by *Sarcophaga helicis*, III. 452.
Snake-Gourd, *Dacus cucurbitae* on, in Ceylon, II. 644.
Snakes, probably destroying grasshoppers in U.S.A., III. 297.
Snapdragon (see *Antirrhinum*).
Snow Scale (see *Chionaspis citri*).
Snowball Aphis (see *Aphis viburni*).
Snowy Tree-Cricket (see *Oecanthus niveus*).
Soap, insecticide formulae containing, I. 78, 107, 209, 217, 230, 237, 239, 252, 338, 353, 356, 357, 376, 388, 402, 423, 427, 433, 471, 473, 538, II. 97, 110, 114, 120, 144, 147, 161, 204, 211, 230, 234, 240, 282, 293, 309, 322, 336, 357, 361, 367, 395, 416, 437, 445, 446, 447, 478, 480, 499, 513, 527, 528, 539, 556, 562, 601, 603, 612, 617, 620, 623, 627, 641, 649, 651, 681, III. 26, 104, 119, 171, 180, 189, 280, 281, 282, 288, 387, 388, 412, 417, 436, 471, 492, 496, 529, 604, 605, 609.
sobrini, Rhabdotis.
sociella, Aphomia.
Society Islands, coconut pests in, I. 136, II. 690.
socrus, Aroa.
Soda, insecticide formulae containing, II. 77, 110, 282, 322, 416, 459, 498, 649, III. 444, 490, 609, 689.
Soda-sulphur, as an insecticide, III. 444, 586.
sodalis, Euarthrus.
Sodium Arsenate, as a bait, formulae for, I. 107, 311, II. 118, 448, 459; used in preparation of lead arsenate (Djipsin), II. 720; formulae for, in sprays, II. 446, 552, 695, III. 422, 427; properties of, as an insecticide, II. 399; advantages of, over sodium arsenite, III. 110; against locusts, II. 72, 206, III. 110; in bait for olive-fly, I. 174, 271, 419, 420; against termites, I. 465, 466, 477; against vine pests, II. 405, 552, 553, 686; against wood-boring beetles, I. 422, II. 402.

Sodium Arsenite, in baits for cutworms, III. 78, 359; against locusts and grasshoppers, II. 95, 114, 509, 565, 566, 699, 700, III. 44, 98, 108, 243, 293, 361, 442, 461, 467, 603, 611, 618; against olive-fly and fruit-flies, II. 289, 452, III. 36, 87; ineffective against *Plagiolepis* in Java, III. 663; in bait for *Technomyrmex albipes*, I. 474; in baits, formulae for, III. 36, 37, 78, 243, 359, 360, 361, 442, 611; in sprays, formulae for, II. 90, 97, 162, 446, 680, III. 611; value and properties of, as an insecticide, II. 37, 399; less effective than copper sulphate against olive-fly, II. 479; for preserving timber against termites, I. 13.

Sodium Benzoate, as a preservative for cactus solution, III. 296.

Sodium Borate, against olive-fly, II. 289.

Sodium Carbonate, in copper sprays, II. 587, 681; with arsenic against *Phthorimea operculella* (*solanella*), II. 119; and lead arsenate, against vine pests, II. 446, 552, 683; and nicotine, II. 539, 666; and soap, against Aphids and Coccids, II. 478, 649; formula for, against *Eriosoma lanigerum*, II. 293.

Sodium Chloride, formulae containing, II. 123, 159, 448, 498.

Sodium Cyanide, fumigation with, against scale-insects, etc., I. 383, II. 437, 702, III. 621; fumigation with, against *Carpophilus hemipterus*, III. 685; formula for, III. 622; see Hydrocyanic Acid.

Sodium Fluoride, against cockroaches, II. 653; effect of, on insects, III. 692.

Sodium Hydroxide, effect of, on Tachinid eggs, III. 711.

Sodium Hyposulphite, against ants, I. 224, II. 345, III. 138.

Sodium Nitrate, as a manure, against wireworms, I. 378, III. 59, 366; winter spraying with, II. 242; soil disinfection with, II. 255.

Sodium Polysulphide, against *Chrysomphalus dictyospermi*, III. 430.

Sodium Sulphide, against *Aspidiotus perniciosus*, II. 66; cannot be combined with lead arsenate, III. 737.

Sodium Sulphoricinate, in spray against *Eriosoma lanigerum*, II. 234, 410.

Soft Brown Scale (see *Coccus hesperidum*).

sokolowi, Telenomus.

solanella, Aphis; *Phthorimaea* (*Lita*) (see *P. operculella*).

solani, Gargaphia; *Megoura*; *Noctua*; *Premnotrypes*; *Pseudococcus*; *Rhopalosiphum.*

solanifolii, Macrosiphum.

Solanophila bosci, predaceous on *Aphis gossypii* in Uganda, II. 592.

Solanum, Aphis solanella on, in E. Africa, II. 571; *Helopeltis* on, in Gold Coast, II. 671; mosaic disease of tobacco in, I. 19.

Solanum aviculare, Phytometra chalcites on, in New Zealand, III. 721.

Solanum capsicum, woodlice on, in Ontario, II. 491.

Solanum carolinense, Gargaphia solani on, in U.S.A., II. 664, III. 575; *Phthorimaea operculella* on, II. 280.

Solanum commersoni, Phthorimaea operculella on, II. 401.

Solanum douglasi, Pseudococcus spp. on, in California, I. 325, II. 247, III. 457.

Solanum dulcamara (Bittersweet), *Phthorimaea operculella* on, II. 401; *Aulacaspis pentagona* on, I. 222.

Solanum elaeagnifolium, Gargaphia solani on, in U.S.A., II. 664, III. 575.

Solanum jasminoides, Saissetia oleae on, in California, III. 85.

Solanum lycopersicum (see Tomato).

Solanum maglia, Phthorimaea operculella on, II. 401.

Solanum melongena (see Egg-plant).

Solanum miniatum (Red Nightshade), *Phthorimaea operculella* on, II. 401.

Solanum nigrum (Wonderberry), *Epitrix* spp. on, in N. America, I. 203, 299; *Phytometra chalcites* on, in New Zealand, III. 721; *Phthia pica* on, in Porto Rico, III. 476; not attacked by *Phlyctaenodes sticticalis* in Russia, I. 534; *Phthorimaea operculella* on, II. 280.

Solanum seaforthianum, Orthezia insignis on, in E. Africa, II. 429.

Solanum torvum, Phthorimaea operculella on, II. 280; *Pachyzancla periusalis* on, in Porto Rico, III. 477.

Solanum tuberosum (see Potato).

Solanum venustum, Tarsonemus translucens on, in Ceylon, II. 151.

Solanum verbascifolium, Phthorimaea operculella on, II. 280.

Soldier Bug (see *Coriscus inscriptus*).
Solenopsis, predaceous on *Galleria mellonella*, I. 453, II. 379.
Solenopsis geminata (Fire Ant), infected with *Coccobacillus* in the Argentine, II. 462; predaceous on *Scapteriscus didactylus* in Cuba, I. 324; in Peru, I. 316; on *Hibiscus esculentus* in Philippines, I. 314; on *H. esculentus* in Porto Rico, III. 477; associated with scale-insects in Porto Rico, I. 185; predaceous on froghoppers in Trinidad, II. 62; exterminated by Argentine ant in U.S.A., I. 327; predaceous on *Anthonomus grandis* in U.S.A., III. 12.
Solenopsis molesta, predaceous on *Blissus leucoptera* and *Cydia pomonella* in U.S.A., II. 227, III. 476.
Solenopsis pylades, in Peru, I. 316.
Solenothrips rubrocinctus (see *Heliothrips*).
solida, Anomala.
Solidago (Golden-rod), pests of, in N. America, I. 15, 430, II. 665, 674, III. 87, 351.
solidus, Platypus; *Xyleborus.*
Solignum, against termites, I. 89, 465; against wood-boring beetles, I. 423.
Solindemia picticornis, in bait-traps for *Ceratitis capitata*, III. 568.
solitaria, Perineura.
solitarius, Apanteles.
Solomon Islands, coconut pests in, II. 689, 690, 691, III. 27, 754.
Solomon Islands Coconut Hispid (see *Promecotheca antiqua*).
solstitialis, Amphimallus (*Rhizotrogus*).
Sombre Twig Pruner (see *Therclados kraussi*).
somniaria, Therina.
sonchae, Aphis.
sonchi, Macrosiphum.
Sonchus (Sow-thistle), Aphids on, II. 81, 510, 571.
Sonchus arvensis, Rhopalosiphum lactucae on, in Maine, II. 510; *Phytomyza albiceps* on, in New Zealand, III. 722; in Russia, II. 212, 315.
Sonchus asper, Phytomyza albiceps on, in New Zealand, III. 722.
Sonchus oleraceus, Rhopalosiphum lactucae on, in Colorado, III. 351; *Phytomyza albiceps* on, in New Zealand, III. 722; *Macrosiphum sonchi* on, III. 749.
Sooty Fungus of Olive, control of, in France, III. 257.
Sophia ochroleuca (Pepper Grass), *Typhlocyba comes* on, in U.S.A., III. 530.
sophiae, Colaphus; *Colaspidema.*
Sophora japonica, food-plant of *Aulacaspis pentagona*, I. 222.
sophorae, Brassolis; *Pseudagrilus.*
Sorb Tree (see Service Tree).
sorbi, Aphis.
sorbiana, Tortrix.
Sorbus, Megastigmus brevicaudis in seeds of, in N. America, I. 297; pests of, in Russia, I. 208, II. 11; as a bait tree against *Scolytus*, II. 51.
Sorbus americana, Aspidiotus perniciosus on, in Quebec, I. 379.
sordida, Cysteochila.
sordidus, Campoplex; *Cosmopolites* (*Sphenophorus*).
sordipes, Hemiteles.
sorghella, Aphis (see *A. sorghi*).
sorghi, Aphis.
sorghicola, Contarinia (*Diplosis*).
sorghicida, Busseola.
Sorghum (Broom Corn, Cholam, Sudan Grass) (*Andropogon sorghum*), pests of, in E. Africa, I. 247, 413–415, II. 276, 571; Aphids on, in Tropical Africa, II. 571, 588, 630; *Sesamia nonagrioides* (*vuteria*) on, in Algeria, I. 43; pests of, in Far East, I. 169, 170, II. 490; pests of, in India, I. 344, II. 67–69, 139, 140, 487, III. 174; pests of, in Russia, II. 467, III. 700; not attacked by *Oria musculosa* in Russia, II. 319, 392; pests of, in U.S.A., I. 124, 429, II. 227, III. 184, 451, 512, 574, 576, 683; pests of, in West Indies, II. 23, III. 674; (see Millet).
Sorghum halepense (Johnson Grass), *Toxoptera graminum* on, in S. Africa, II. 153, 154; *Pseudococcus sacchari* on, in Costa Rica, I. 20; pests of, in U.S.A., I. 430, II. 303, III. 184, 333, 451, 576.
Sorghum Midge (see *Contarinia sorghicola*).
Sorindeya, Pseudococcus filamentosus on, in E. Africa, II. 146.
soror, Chorizagrotis (see *Euxoa auxiliaris*); *Clanis*; *Diabrotica.*
sororia, Tomaspis.
Sorosporella uvella (Red Muscardine), infesting *Bothynoderes punctiventris* in Russia, II. 178.
Sorrel, *Gastroidea viridula* on, in Russia, III. 105; *Saissetia nigra* on, in St. Vincent, I. 198.
Sour-brood (see Sacbrood).
Sour Cherry, *Galerucella cavicollis* on, in Pennsylvania, III. 588.

Soursop (see *Anona muricata*).
South Africa (see Africa, South).
South American Migratory Locust (see *Schistocerca paranensis*).
South Sea Islands, pests of coconuts in, II. 2, 691.
South-western Green Flea-Beetle (see *Haltica foliacea*).
Southern Corn-leaf Beetle (see *Myochrous denticollis*).
Southern Corn Root-worm (see *Diabrotica 12-punctata*).
Southern Hornworm (see *Protoparce sexta*).
Southern Pine Beetle (see *Dendroctonus frontalis*).
Sow Thistle (see *Sonchus*).
Soy Bean (*Glycine hispida*), *Ceroctis trifurca* on, in Nyasaland, II. 277; not attacked by *Agromyza fabalis* in Rhodesia, I. 290; pests of, in U.S.A., I. 430, III. 153, 333.
Spain, protection of birds in, II. 155; *Calliephialtes messor* introduced into California from, II. 137; citrus pests and their control in, I. 99, 278, 297, 312, III. 102, 143, 524; cork tree pests in, II. 164; miscellaneous pests in, I. 190, 312, 421, II. 401, 608, III. 276; pests of wheat in, I. 375, 421.
Spalangia, parasite of *Ceratitis capitata* in W. Africa, II. 317; establishment and liberation of, in Hawaii, III. 169, 170, 289, 364, 412, 413, 712.
Spalangia hirta, parasite of *Dacus cucurbitae* in Hawaii, III. 29.
Spalgis epius, destroying Coccids in Ceylon, II. 651, III. 83, 157, 168; in Java, I. 3.
Spalgis lemolea, destroying Coccids in Nigeria, II. 203, III. 165.
Spalgis substrigata, destroying mealy bugs in Philippines, II. 243.
Spanish Broom (*Spartium junceum*), *Icerya purchasi* on, in U.S.A., III. 73.
Spanish Moss, thrips on, in Florida and Louisiana, III. 631.
Spanish Pepper, *Dacus ferrugineus* on, in Java, III. 4.
Sparganothis (*Oenophthira*) *pilleriana* (Vine Pyrale, Vine Tortrix), bionomics and control of, in European vineyards, I. 9, 10, 228, 315, II. 91, 229, 309, 411, 421, 443, 499, 539, 552, 607, 679, 685, III. 113, 209, 226, 427, 522, 563, 615, 617; on strawberries in Holland, III. 194.
Sparmannia africana, *Saissetia oleae* imported on, from S. Africa, II. 554.
Sparnopolius fulvus, parasite of *Lachnosterna* and *Galerucella luteola* in Illinois, I. 528.
Sparrow, White-crowned (see *Zonotrichia leucophrys*).
Sparrows (*Passer*), destroying insects, I. 42, 226, 305, 518, II. 94, 155, 509, 527, III. 370, 380, 404, 537, 559.
Sparrow-hawk, destroying grasshoppers, III. 297.
sparsus, *Cleonus*.
Spartium junceum (see Spanish Broom).
Spartocera batatas, on sweet potato in Porto Rico, III. 476.
spathipennis, *Xyleborus*.
speciosa, *Aplectoides*.
speciosissimum, *Polynema*.
speciosus, *Plagionotus*.
spectabilis, *Arctia*; *Metapelma*.
spectra, *Tettigoniella*.
spectrum, *Apopestes*.
Spelt, pests of, in Canada, I. 39, III. 630.
spengleri, *Diaprepes abbreviatus*.
Spermatophilus guttatus, in Bessarabia, I. 399.
spermatrophus, *Megastigmus*.
Spermophagus piurae, sp. n., on cotton in Peru, III. 273.
Spermophilus (see *Citellus*).
spermophilus, *Eupelmus*.
Sphaeralcea lindheimeri, *Anthonomus grandis* on, in Texas, II. 528.
sphaericolle, *Lathrobium*.
sphaericollis, *Apocellus*.
sphaeristicus, *Dacus* (*Tridacus*).
Sphaerococcus bambusae, on sugarcane in Mauritius, I. 31.
Sphaerocoris annulatus, on coffee in E. Africa, I. 415.
Sphaerocoris ocellus, on coffee in E. Africa, I. 107, II. 570.
sphaeroides, *Peritelus*.
Sphaerophoria melanosa, predaceous on *Monellia caryae* in U.S.A., III. 142.
Sphaerophoria (*Melithreptus*) *scripta*, predaceous on Aphids in Russia, III. 308, 481.
Sphaerophoria sulphuripes, predaceous on *Monellia caryae* in U.S.A., III. 142.
Sphaeropyx bicolor, parasite of *Acronycta clarescens* in U.S.A., II. 132.
Sphaerostilbe coccophila (Red-headed Fungus), infesting scale-insects, I. 76, 77, 97, 101, 251, 263, II. 78, 88, 129, 142, 165, 416, 569, 672, III. 22, 417, 650.
Sphaerotheca mors-uvae, gooseberries protected from, by planting tobacco, III. 340.

Sphaerotrypes siwalikensis (*assamensis*), in India, III. 706.
sphagni, Pseudococcus.
sphenariodes, Colemania.
sphenophori, Ceromasia.
Sphenophorus, in Florida, I. 264; on coconut in Jamaica, III. 650.
Sphenophorus callosus, on maize in Arizona, III. 512; on rice, etc., in N. Carolina, I. 262.
Sphenophorus discolor, on wheat, etc., in California, I. 383.
Sphenophorus ensirostris, on coconut in Brazil, III. 695.
Sphenophorus hemipterus (see *Metamasius*).
Sphenophorus nebulosus, new pest of sugar-cane in Fiji, III. 133.
Sphenophorus obscurus (see *Rhabdocnemis*).
Sphenophorus parvulus (Little Grass Bill Bug), bionomics of, I. 262, III. 426.
Sphenophorus sericeus (see *Metamasius*).
Sphenophorus sordidus (see *Cosmopolites*).
Sphenophorus striatus (see *Cosmopolites sordidus*).
Sphenoptera, on cotton in Africa, I. 349.
Sphenoptera gossypii, II. 579; on cotton in Africa, II. 1.
Sphenoptera neglecta, on cotton in Africa, I. 545, II. 1, 579.
Sphenostethus taslei, food-plants of, in U.S.A., III. 580.
sphingis, Telenomus.
Sphingonotus callosus, in Russia, III. 636.
Sphingonotus (*Oedipoda*) *coerulans*, bionomics of, in Russia, III. 44, 636.
Sphingonotus nebulosus, in Russia, III. 636.
Sphingonotus yorkensis, on cotton in Africa, I. 349.
Sphinx, experiments with *Pimpla instigator* and, II. 6, 214.
Sphinx ligustri, parasites of, II. 215, III. 401.
Sphinx (*Smerinthus*) *ocellatus*, on apples in Ireland, II. 656.
Sphodromantis lineola, predaceous on Aphids in Uganda, II. 59.
sphondylium, Heracleum.
Sphyrapicus varius, destroying *Diabrotica duodecimpunctata* in U.S.A., I. 431.
Spicaria, infesting vine-moths, III. 189.
Spicaria farinosa, experiments with *Phthorimaea operculella* and, II. 401.
Spicaria farinosa var. *verticilloides*, infesting *Clysia* and *Polychrosis*, II. 409.
Spice-bush, not attacked by *Lymantria dispar* in U.S.A., III. 669.
spiculatus, Ergates.
Spiders, I. 45, 120, 143, 201, 303, II. 62, 64, 96, 282, 326, 358, 409, 456, 463, 607, 670, 710, III. 8, 247, 271, 286, 308, 452, 500.
Spider Mites (see *Tetranychus* and *Bryobia*).
Spilochalcis (*Smicra*) *albifrons*, parasite of *Agrotis unicolor* in U.S.A., III. 371.
Spilochalcis delira, hyperparasite of *Cirphis* spp. in Texas, III. 684.
Spilochalcis maniae, parasite of *Samia ceanothi* in California, III. 420.
Spilochalcis pallens, hyperparasite of *Cirphis* spp. in Texas, III. 684.
Spilogale interruptans (Pole-cat), destroying peach-tree borers in U.S.A., II. 254.
Spilographa cerasi (see *Rhagoletis*).
Spilographa (*Trypeta*) *zoë*, on Jerusalem artichoke, III. 33.
Spilomena (*Celia*) *troglodytes*, predaceous on *Targionia vitis* in France, II. 609.
Spilonota ocellana (see *Eucosma*).
Spilosoma lubricipeda (see *Diacrisia*).
Spilostethus equestris (see *Lygaeus*).
Spinach, pests of, in Canada and U.S.A., I. 298, II. 665, III. 89, 530; pests of, in France, I. 69, 188, II. 90; *Aphis rumicis* on, in Germany, II. 494; pests of, in Italy, III. 124; *Laphygma exigua* on, in Rhodesia, III. 359; association of *Pegomyia hyoscyami* with, II. 616.
Spinach Flea-Beetle (see *Disonycha xanthomelana*).
spinaciae, Aricia.
Spinaria, destruction of, to control *Pegomyia hyoscyami*, III. 608.
spinarum, Athalia (see *A. colibri*).
Spindle Tree (see *Euonymus europaeus*).
Spindlewood, Japanese (see *Euonymus japonicus*).
Spined Soldier Bug (see *Podisus spinosus*).
spinicornis, Hoplocerambyx.
spinidens, Andrallus.
spinifera, Euxoa.
spinipes, Tarsonemus.
spinitarsis, Hypopus.
Spinning Mite (see *Tetranychus*).
spinosa, Lepidosaphes (*Mytilaspis*).
spinosus, Ctenochiton; *Jalysus*; *Podisus.*

Spiny Boll-worm (see *Earias insulana*).
Spiny Elm Caterpillar (see *Vanessa antiopa*).
Spiraea, *Anthrenus scrophulariae* on, III. 184; Aphids on, in Maine, III. 424; *Aspidiotus perniciosus* on, II. 390; *Dendrolimus* spp. on, II. 220; *Zeuzera* on, I. 3.
Spiraea japonica, food-plant of *Aulacaspis pentagona*, I. 222.
Spiraea ulmaria, food-plant of *Aphis pisi*, but not of *Acyrthosiphon pisi*, III. 702, 704.
spiraecola, *Aphis*; *Myzus*.
spiraephila, *Aphis*.
spirale, *Theridion*.
spirifex, *Tarsonemus*.
Spiza americana, destroying insects in U.S.A., II. 709.
Spizella pusilla, food of nestlings of, I. 305.
splendana, *Cydia* (*Carpocapsa*).
splendens, *Chrysoplatycerus*; *Siphocoryne*.
splendida, *Icerya*; *Lonchaea*.
splendidella, *Dioryctria* (*Phycis*).
splendidus, *Perilampus*.
Split Worm (see *Phthorimaea operculella*).
Spodoptera mauritia, on rice and tobacco in Far East, measures against, II. 489, 490; on rice, etc., in India, II. 68, 139; on sugar-cane in Mauritius, I. 31; on maize in Philippines, I. 154.
Spodoptera pecten, on sugar-cane in Far East, II. 490.
Spondias lutea, *Ceratitis anonae* on, in Nigeria, I. 97; pests of, in Porto Rico, II. 50, III. 476.
Spondias mangifera (Hog Plum), *Batocera hector* on, in Java, II. 535.
sponsa, *Catocala*.
Sporotrichum, infesting insects, I. 323, III. 24, 454.
Sporotrichum globuliferum, in N. America, I. 401, 430; ineffective against Argentine ants in California, I. 327; infesting vine pests in France, I. 228, 316, 419, II. 607; infesting grasshoppers, III. 297; infesting *Blissus leucopterus*, I. 173, 524, II. 227, 469, III. 136, 509.
Sporotrichum poae, causing bud-rot in carnations, III. 566.
Spotted Borer (see *Diatraea venosata*).
Spotted Blister Beetle (see *Epicauta maculata*).
Spotted Click Beetle (see *Monocrepidius vespertinus*).
Spotted Cutworm (see *Agrotis c-nigrum*).
Spotted-legged Cutworm (see *Porosagrotis vetusta*).
Sprayers, proposed manufacture of, in Russia, III. 95; self-propelled, use of, in Texas, III. 330; for use on pack-saddles, III. 388.
Sprays, list of, which can be successfully mixed together, II. 389; methods of using, in orchards, II. 709, III. 445, 513, 514, 554, 675; (see under the various insecticides).
Spreo bicolor, destroying locusts in S. Africa, II. 574.
Spring Canker Worm (see *Palaeacrita vernata*).
Springtails (see *Smynthurus*).
Spruce (*Picea excelsa*), pests of, in Britain, I. 119, 120, 434, II. 168, 271, 618, 619, 656, III. 633, 715; not attacked by *Exomias pellucidus* in Britain, III. 288, 564; pests of, in Canada, I. 91, 406, 407, 412, II. 24, 25, III. 3, 19; *Chermes* on, in France, II. 14; pests of, in Holland, I. 386, III. 742; pests of, in Russia, II. 220, 516, III. 43; pests of, in Sweden, III. 290, 767; pests of, in U.S.A., I. 100, 140, 141, 200, 201, II. 361, 710, III. 407, 474, 515, 668; resistant to gipsy moth, I. 35, II. 711.
Spruce, Black (see *Picea nigra*).
Spruce, Engelmann's (see *Picea engelmanni*).
Spruce, Sitka (see *Picea sitchensis*).
Spruce, White (see *Picea alba*).
Spruce Aphis, Green (see *Aphis abietina*).
Spruce Bark-Beetle (see *Ips typographus*).
Spruce Bud Scale (see *Physokermes piceae*).
Spruce Bud-worm (see *Tortrix fumiferana*).
Spruce Gall Louse (see *Chermes abietis* and *C. similis*).
Spruce Sawfly (see *Lophyrus abietis*).
spumaria, *Aphrophora*.
spuria, *Ateleneura*; *Gossyparia*; *Hippodamia*.
spurius, *Apanteles*.
squalidus, *Sciaphobus* (*Sciaphilus*).
squamiger, *Homovalgus*.
squamosus, *Hypomeces*.
squamulatus, *Crossotarsus*; *Pseudoleptomastix*.
Square-necked Grain Beetle (see *Cathartus gemellatus*).
Squash, pests of, in Canada, I. 406; *Dacus* (*Bactrocera*) *cucurbitae* on, in Hawaii, I. 374, III. 163;

Diabrotica spp. on, in Porto Rico, III. 476; pests of, in U.S.A., I. 53, 180, 219, 241, 299, 418, 430, 517, II. 120; (see Pumpkin).
Squash Bug (see *Anasa tristis*).
Squash Capsid (see *Pycnoderes quadrimaculatus*).
Squash Vine Borer (see *Melittia satyriniformis*).
Stable-fly, parasites of, in Hawaii, III. 289.
stabulans, Muscina.
Stagmatophora gossypiella (see *Pyroderces simplex*).
Stagmomantis carolina, a beneficial insect in Missouri, I. 284; *Sarcophaga helicis* stated to parasitise, III. 423.
Stalagmoptera, destroying locusts in Turkestan, II. 509.
stanfordi, Physcus.
Star Scale (see *Vinsonia stellifera*).
Star Apple (see *Chrysophyllum cainito*).
Starlings, destroying insects, I. 244, 305, 360, 378, 462, 464, 481, II. 147, 463, 504, 509, 529, 574, III. 243, 270, 551, 603, 746.
Stauroderus biguttulus, bionomics of, in Russia, III. 636.
Stauroderus morio (see *S. scalaris*).
Stauroderus scalaris (*Stenobothrus morio*), bionomics of, in Russia, II. 474, III. 437.
Stauronotus (see *Dociostaurus*).
Stauropus alternus (Lobster Caterpillar), control of, on tea, etc., in India and Ceylon, II. 643, III. 123, 488, 663.
Steam, use of, against eel-worms, III. 123, 177, 267; use of, against vine pests, III. 562; (see Water, Hot).
stebbingi, Monophlebus.
Steel-blue Flea-Beetle, *Perilloides modestus* predaceous on, II. 665.
Steel-blue Ladybird (see *Orcus chalybeus*).
Steel-blue Wood Wasp (see *Sirex juvencus*).
Steganoptycha diniana (see *Enarmonia*).
Steganoptycha minutana, on chrysanthemums in Russia, II. 425.
Steganoptycha pinicolana (see *Enarmonia diniana*).
Steirastoma (see *Stirastoma*).
Steiroxys borealis, in Oregon, III. 263.
stellata, Plectana.
stellifera, Vinsonia.
Stenachroia elongella, on cholam in Madras, II. 139.
Stenaphis monticelli, sp. n., on reeds, etc., in Italy, III. 54.
Stenobothrus, in Russia and Siberia, III. 40, 537.
Stenobothrus biguttulus (see *Stauroderus*).
Stenobothrus fischeri, bionomics of, in Russia, III. 636.
Stenobothrus haemorrhoidalis (see *Omocestus*).
Stenobothrus lineatus, Mylabris sibirica attacking egg-clusters of, in Russia, II. 474.
Stenobothrus morio (see *Stauroderus scalaris*).
Stenobothrus nigromaculatus, bionomics of, in Russia, III. 636.
Stenobothrus pulvinatus (see *Chorthippus*).
Stenobothrus rufipes (see *Omocestus ventralis*).
Stenocarus fuliginosus, on poppies in Russia, I. 487.
Stenocranophilus quadratus, sp. n., parasite of *Stenocranus saccharivorus* in Porto Rico, III. 17.
Stenocranus (*Delphax*) *saccharivorus* (Sugar-cane Leaf-hopper, Sugar-cane Fly), bionomics of, in West Indies, I. 185, II. 31, 49, 532, III. 17, 26, 134; legislation against, in Br. Guiana, III. 175.
Stenodontes downesi (see *Mallodon*).
Stenodontes insularis, on coconut in South Sea Islands, II. 2.
Stenoma (*Antaeotricha*) *anonella*, bionomics of, on custard apple in Brazil, III. 388.
Stenomacra, parasite of, in Peru, I. 172.
Stenomacra limbatipennis in Peru, I. 172.
Stenopleura sesamiae, parasite of *Busseola fusca* in S. Africa, I. 144.
Stenopogon picticornis, predaceous on *Colias eurytheme* in U.S.A., III. 154.
stenoptera, Corynothrips.
Stenoptycha lulella (see *Euzophera semifuneralis*).
Stenothrips graminum, on oats in Russia, II. 170, III. 206.
Stephanitis, on apples and pears in Turkestan, II. 715.
Stephanoderes arecae, on *Areca catechu* in East Indies, I. 350.
Stephanoderes aulmanni, on *Coffea bukowensis* in E. Africa, I. 351.
Stephanoderes coffeae (Coffee-bean Borer), on coffee, etc., in Africa, I. 49, 351, II. 59, 240, 447, 591, III. 649, 751.
Stephanoderes congonus, on *Hevea brasiliensis* in Africa, I. 351, III. 649.
Stephanoderes hampei, on coffee in Java, I. 351.

Stephanoderes heveae, on *Hevea brasiliensis* in Africa, I. 351, II. 414, III. 649.
Stephanoderes moschatae, on nutmeg in Guadeloupe, I. 351.
stercoraria, Scatophaga.
stercorarius, Geotrupes.
stercorator, Pimpla.
Sterculia alata, Pseudococcus filamentosus on, in E. Africa, II. 146.
Sterculia fulgens, Coccus hesperidum on, in Barbados, II. 533.
Sterculia platanifolia, food-plant of *Aulacaspis pentagona*, I. 222.
Sternotomis bohemani, on rubber in E. Africa, I. 414, II. 414.
Stethophyma flavicosta (see *Arcyptera*).
Stethophyma (*Mecostethus*) *grossum*, in Russia, III. 401.
Stethophyma turcomana (see *Pallasiella*).
Stethorus, predaceous on *Tenuipalpus banksi* in U.S.A., III. 306.
Stethorus picipes, predaceous on *Tetranychus*, I. 144.
Stethorus (*Scymnus*) *punctum*, predaceous on *Tetranychus* and Aphids, I. 242, 353, II. 704.
Sticholotus punctatus, in bait-traps for *Ceratitis capitata*, III. 568.
Stickweed (*Aster ericoides*), *Crambus caliginosellus* on, in Virginia, II. 525.
Stictaspis ceratina, III. 723.
stictica, Atelocera; *Ceratitis*; *Cetonia* (see *Oxythyrea funesta*).
sticticalis, Phlyctaenodes (*Botys, Eurycreon, Loxostege*).
stictigrapta, Characoma.
Stictipleurus crassicornis (see *Corizus*).
Stictocephala festina, bionomics of, on lucerne, etc., in U.S.A., III. 333.
Stictocephala festina var. *rufivitta*, III. 333.
Stictocephala inermis, on apple and pear in Oregon, III. 272.
stictococci, Tetrastichus.
Stictococcus, on coffee in Nigeria, III. 166.
Stictococcus dimorphus, on cacao, etc., in Nigeria, III. 165; bionomics of, on cacao in Uganda, I. 49, II. 59, 592, III. 288, 663, 752.
Stictococcus diversiseta, III. 289; parasites of, in W. Africa, III. 433, 434.
Stictococcus formicarius, on *Ficus* in Uganda, III. 289.
Stictococcus gowdeyi, on coffee in Uganda, II. 59, 591, III. 289, 752.
Stictococcus sjöstedti, on cacao and kola in W. Africa, II. 203, III. 165, 547; natural enemies of, in W. Africa, III. 433.
Stigmacoccus zimmermanni, on rubber in E. Africa, I. 415, II. 415.
Stigmaeopsis celarius, on bamboo in California, III. 420.
stigmaticollis, Diocalandra (see *D. frumenti*).
Stilpnotia salicis (Willow Moth), bionomics of, on fruit trees, etc., in Russia, I. 206, 209, 432, II. 50, III. 138, 221, 403, 610, 742.
Stinkweed, poisoned with Paris green against *Euxoa agrestis*, III. 565.
Stipa, not attacked by *Phlyctaenodes sticticalis* in Russia, I. 360.
Stirastoma depressum (Cacao Beetle), bionomics and control of, in West Indies, I. 122, 270, 425, II. 70, 87, 146, 324, 459, 646, III. 14, 122, 137, 276, 367, 368, 468, 583, 660; legislation against, in Br. Guiana, III. 175.
stomachosus, Omophorus.
Stomatorrhina lunata (*Idia fasciata*), parasite of locusts in Algeria, III. 428.
Stork, European (see *Ciconia alba*).
Strachia (see *Eurydema*).
Strachia pustulata (see *Eurydema festivum* var. *decoratum*).
straminea, Bactra.
strangulatus, Trochorrhopalus.
Strategus, on palms in Tropical America, II. 99.
Strategus aloeus, on coconut in Br. Guiana, II. 569, III. 591; on sugar-cane in West Indies, I. 254.
Strategus titanus, on sugar-cane in West Indies, I. 254, II. 49, 145.
Strawberry (*Fragaria*), *Hyperoides fragariae* on, in S. Africa, III. 167; pests of, in Australia, I. 514, III. 366; pests of, in Britain, I. 236, 388, II. 563, 598, 656, III. 633, 660; pests of, in Canada, I. 90, 93, 168, 298, 299, 400, II. 24, 492, 676, III. 7; pests of, in France, I. 234, 472, II. 16, 230, 285, 421, 557; pests of, in Holland, I. 385, III. 194, 198, 743; pests of, in Russia, I. 437, II. 36, 53, 199, 335, 368, 480, 718, III. 47, 119, 220, 221, 389, 393, 540, 542; pests of, in Sweden, III. 107, 695; pests of, in Switzerland, I. 345; pests of, in U.S.A., I. 140, 265, 266, 277, 475, II. 121, 244, 251, 439, 459, 555, 693, III. 17, 52, 64. 136, 178, 179, 181, 192, 270, 306, 327, 423, 425, 512, 515, 516, 546.
Strawberry Crown Borer (see *Tyloderma fragariae*).
Strawberry Crown Girdler (see *Otiorrhynchus ovatus*).

Strawberry Crown Miner (see *Aristotelia*).
Strawberry Crown Moth (see *Aegeria rutilans*).
Strawberry False Worm (see *Harpiphorus maculatus*).
Strawberry Flea-Beetle (see *Haltica ignita*).
Strawberry Guava, *Ceratitis capitata* on, in Hawaii, I. **374.**
Strawberry Leaf-roller (see *Ancylis comptana*).
Strawberry Millipede (see *Blaniulus guttulatus*).
Strawberry Root Louse (see *Aphis forbesi*).
Strawberry Root Weevil (see *Otiorrhynchus ovatus*).
Strawberry Tree (see *Arbutus unedo*).
Strawberry Weevil (see *Anthonomus signatus* and *Rhinaria perdix*).
Strawberry Whitefly (see *Asterochiton packardi*).
strepens, Epacromia
Streptococcus apis, infesting bees, I. **523.**
striata, Alesia; *Anastrepha.*
striatalis, Delphax; *Diatraea* (see *D. venosata*).
striaticollis, Hispa.
striatum, Anobium.
striatus, Acocephalus; *Anaphothrips*; *Deltocephalus*; *Ormyrus*; *Sphenophorus* (see *Cosmopolites sordidus*).
stridulus, Psophus.
strigatus, Eumerus.
strigifinitella, Acrocercops.
strigipleuris, Pimpla.
String Beans, *Bactrocera cucurbitae* on, in Hawaii, III. **163.**
striola, Abax.
Striped Beet Caterpillar (see *Scotogramma trifolii*).
Striped Cane Looper (see *Mocis repanda*).
Striped Cucumber Beetle (see *Diabrotica vittata*).
Striped Cutworm (see *Euxoa tessellata*).
Striped Poplar Beetle (see *Melasoma scripta*).
Striped Tree-Cricket (see *Oecanthus fasciatus*).
Strix bubo, destroying grasshoppers in Germany, II. **148.**
strobi, Chermes (*Pineus*); *Pissodes.*
strobilella, Cydia (*Laspeyresia*).
strobilobius, Chermes (*Adelges, Cnaphalodes*).
Stromatium, on sandalwood in India, III. **706.**
Strophosomus capitatus, on roses in Holland, III. **743**; *Cerceris quadrifasciata* predaceous on, in Russia, III. **701.**
Strophosomus coryli, food-plants of, in Britain, III. **676, 677.**
Strophosomus obesus (see *S. capitatus*).
Strophosomus rufipes, food-plants of, in Holland, III. **742.**
Strychnine, ineffective against *Limonius californicus* in California, II. **304.**
stupida, Amara.
Sturmia, in Canada, I. **114.**
Sturmia inquinata, parasite of *Protoparce quinquemaculata* in U.S.A., III. **268.**
Sturmia scutellata, experiments with Lepidopterous hosts and, II. **104.**
Sturnella magna, destroying insects in U.S.A., I. **431,** II. **708.**
Sturnella neglecta (Western Meadow Lark), destroying insects, I. **17.**
Sturnus vulgaris (Starling), destroying *Locusta migratoria* in Russia, III. **603.**
stygica, Cantharis.
Stylopidea picta, not recommended to be introduced into Queensland against prickly pear, III. **126**; on *Opuntia* in U.S.A., I. **81.**
Stylops, parasite of *Stenocranus* (*Delphax*) *saccharivorus* in Porto Rico, II. **49.**
Stylopyga orientalis, parasitised by *Evania* spp. in Egypt, II. **504.**
Styphelia richei, Asterolecanium styphelíae on, in Australia, III. **750.**
stypheliae, Asterolecanium.
styx, Acherontia.
Suana concolor, on camphor in Ceylon, II. **597**; on tea in Far East, II. **490.**
suasa, Polia.
subapicalis, Paectes (*Ingura*).
subapterus, Boeotomus; *Homoporus*; *Micromelus.*
subbimaculella, Nepticula.
Subcoccinella 24-punctata, on lucerne in France, II. **577.**
subcrinita, Epitrix.
subfasciata, Hotea.
subferruginea, Cassida.
subflava, Abbella.
subflavescens, Aphelinus.
subgothica, Feltia.
submaculata, Cyanopepla.
submarginatus, Xyleborus.
subpropinquella, Depressaria.
subproxima, Blastothrix.
subpunctata, Heliophila (see *Cirphis latiuscula*).
subsericea, Formica.
subspiculifera, Mytilaspis.
subspinosus, Macrodactylus.
substitutus, Leptocentrus.
substriata, Chionaspis.
substrigata, Spalgis.

subteralbatus, Brachycyttarus.
subterraneus, Aphodius.
subterrans, Amphorophora.
subtilis, Cosmia.
subvexa, Ipimorpha.
subzonatus, Hemiteles.
succinctus, Trachyderes.
succineus, Opius.
suckleyi, Ludius.
Sudan, Anglo-Egyptian, insect pests in, II. 94, 95, 579, III. 748.
Sudan, French, Aphids attacking millet, etc., in, II. 273, 396, 630.
Sudan Grass (see Sorghum).
suffusa, Laelia.
Sugar Apple, *Saissetia nigra* on, in West Indies, I. 198.
Sugar Beet (see Beet).
Sugar-beet Leaf-hopper (see *Eutettix tenella*).
Sugar-beet Root-louse (see *Pemphigus betae*).
Sugar-beet Webworm (see *Phlyctaenodes sticticalis*).
Sugar-beet Wireworm (see *Limonius californicus*).
Sugar-cane (*Saccharum officinarum*), pests of, in S. Africa, I. 270, 301; pests of, in Algeria, I. 43; pests of, in Argentina, III. 92; pests of, in Brazil, II, 206, 627; pests of, in Br. Guiana, I. 139, 319, 521, II. 15, 30, 57, 62, 339, 417, 519, 520, 568, III. 27, 590, 650; pests of, in Costa Rica, I. 20; *Laphygma exigua* on, in Egypt, II. 248; pests of, in Far East, II. 489, 490; pests of, in Fiji, II. 690, III. 133, 726, 748; pests of, in Hawaii, I. 103, 222, 374, III. 17, 757; pests of, in India, I. 169, 170, 482, II. 67, 68, 139, III. 144, 345; pests of, intercepted in India, II. 139; pests of, in Java, I. 169, 351, II. 140, III. 62, 317–320, 382–386; pests of, in Fed. Malay States, II. 111, 134; pests of, in Mauritius and Réunion, I. 28–31, 399, II. 46, 215, 612, III. 160, 730, 731, 756; pests of, in Mexico, I. 184; pests of, in Philippines, I. 65, 481, 482; pests of, in Queensland, II. 17, 152, III. 289, 364, 409, 490, 560, 707, 718, 751; *Scapteriscus didactylus* on, in Surinam, III. 660; pests of, in U.S.A., I. 183, 224, 225, 509, II. 658, III. 184, 382, 471, 509, 581, 683, 761; pests intercepted on, in U.S.A., II. 461, III. 455; pests of, in West Indies, I. 83, 98, 103, 154, 165, 181, 184, 233, 253, 254, 263, 268, 269, 270, 320, 351, 389, II. 31, 47–50, 60, 71, 88, 95, 140, 145, 151, 284, 308, 460, 463, 495, 519, 531, 532, 603, 639, 646, 693, 698, III. 22, 26, 122, 134, 207, 301, 476, 517, 555, 585, 627, 673, 679, 680; *Oryctes monoceros* on, in Zanzibar, III. 124.
Sugar-cane Aphis (see *Sipha graminis*).
Sugar-cane Aphis, Brown (see *Aphis setariae*).
Sugar-cane Aphis, Yellow (see *Sipha flava*).
Sugar-cane Beetle Borer (see *Rhabdocnemis obscurus*).
Sugar-cane Borer (see *Oberea bimaculata*).
Sugar-cane Bud-moth (see *Ereunetis flavistriata* and *Loxostoma*).
Sugar-cane Bud Worm (see *Cirphis humidicola*).
Sugar-cane Fly (see *Stenocranus saccharivorus*).
Sugar-cane Froghopper (see *Tomaspis saccharina*).
Sugar-cane Leaf Aphis (see *Aphis sacchari*).
Sugar-cane Leaf Beetle (see *Myochrous armatus*).
Sugar-cane Leaf-hopper (see *Eutettix tenella*).
Sugar-cane Leaf-hopper, West Indian (see *Stenocranus saccharivorus*).
Sugar-cane Leaf-roller (see *Nacoleia accepta*).
Sugar-cane Mealy Bug (see *Pseudococcus sacchari*).
Sugar-cane Mite (see *Tetranychus exsiccator*).
Sugar-cane Moth Borers (see *Diatraea* and *Castnia*).
Sugar-cane Root Borer (see *Diaprepes abbreviatus*).
Sugar-cane Weevil Borer (see *Rhabdocnemis obscurus*).
Sugar-cane Weevil Root Borer (see *Diaprepes abbreviatus*).
Sugar-cane Weevil, West Indian (see *Metamasius hemipterus*).
Sugar Maple (see *Acer saccharinum*).
Sugar Pine (see *Pinus lambertiana*).
Sugar Pine Cone Beetle (see *Conophthorus lambertianae*).
sulcata, Chelonella.
sulcatus, Gnathotrichus; Lopus; Otiorrhynchus.
sulcicollis, Ceuthorrhynchus; Pachytylus (see *Locusta pardalina*).
sulcifrons. Sitones.
sulcirostris, Cleonus.
sulfurea, Icerya.
Sulphate of Ammonia (see Ammonium Sulphate).
Sulphate of Copper (see Copper Sulphate).

Sulphate of Iron (see Iron Sulphate).
Sulphide of Carbon (see Carbon Bisulphide).
Sulphoricinate of Soda, against Aphids, II. 234, 410.
Sulphur, and caustic soda in sprays, III. 178, 179; chemical composition of compounds of, II. 209, 546, III. 447; dusting with, I. 74, 269, 338, 508, II. 19, 140, 151, 190, 297, 313, 344, 355, 425, 459, 498, 514, 537, 545, 551, 587, 642, 645, 701, 708, 709, III. 12, 120, 137, 188, 223, 295, 450, 557, 602; and copper sulphate, in sprays, III. 562; forms of, used in agriculture, I. 291, II. 209, 610; fumigation with, I. 286, 355, 383, 452, 454, 486, 507, 568, II. 158, 164, 224, 379, 445, 522, 607, 622, 687, III. 185, 391, 504, 592, 732; and oils, mixtures of, II. 246, 546; and soap in sprays, I. 217, 353, II. 209, 607, III. 201, 459; cost of, II. 239; how to ascertain purity of, III. 589; (see Lime-sulphur).
Sulphur Dioxide, I. 286; against *Gelechia gossypiella*, II. 219; evolution of, from lime-sulphur wash, II. 545.
Sulphur, Liver of (see Potassium Polysulphide).
sulphurella, Dasycera.
Sulphuretted Hydrogen, as an insecticide, I. 10; evolved from lime-sulphur spray, II. 544; against underground pests, II. 363; against vine pests, III. 211.
sulphureus, Cteniopus; Termes.
Sulphuric Acid, against *Silvanus surinamensis*, III. 409.
sulphuripes, Sphaerophoria.
Sulphurous Acid, fumigation with, against *Sparganothis pilleriana*, III. 616.
Sulphurous Anhydride, mode of using, against ants, II. 224.
Sumac (*Rhus*), *Polychrosis botrana* on, in Russia, III. 210; pests of, in U.S.A., II. 135, 390, 351, III. 668; *Aegeria* (*Sesia*) *tipuliformis* on, in France, I. 68.
Sumatra, insect pests in, I. 13, 14, 56, 111, 351, 355, II. 280, 534, III. 202, 248, 452.
Sunda Islands, *Papilio polytes* on citrus in, II. 311.
Sundri (see *Heritiera*).
Sunflower (*Helianthus*), fruit-flies feeding on flowers of, in Hawaii, III. 29; Tortricid moth intercepted in seed of, from Portugal, III. 364; pests of, in Russia, I. 447, 460, 493, 530, II. 34, 44, 424, 718, III. 7, 45, 46, 47, 171, 221, 442, 481, 606; not attacked by *Oria musculosa* in Russia, II. 319, III. 5; pests of, in Canada and U.S.A., I. 430, II. 247, 251, III. 62, 457, 459, 753.
superbus, Leptomastix; Phymateus.
supernotatus, Psenocerus.
superstitiosa, Hemerodromia.
superstitiosus, Dysdercus.
supressaria, Buzura (*Biston*).
Surface Tension, in relation to insecticides, I. 46, II. 211, III. 284.
Surinam (see Dutch Guiana).
Surinam Cherry (*Eugenia micheli*), *Ceratitis capitata* on, in Bermuda, III. 171.
surinamensis, Silvanus.
sutor, Monochamus.
suturalis, Amblyteles; Anthonomus; Brumus; Cordylomera; Lochmaea; Opius.
Svida stolonifera, Anoecia corni on, in Colorado, III 351
Swallows destroying insects, I. 244, 360, 479, 530, II. 227, 307, 525, III. 256, 370.
Swammerdamia castaneae, sp. n., on *Castanea dentata* in U.S.A., III. 248.
Swamp Bedstraw (see *Galium uliginosum*)
Swede, pests of, in Britain, I. 387, III. 500, 715; pests of, in Denmark, III. 698; *Laphygma exigua* on, in Rhodesia, III. 359; *Dolycoris baccarum* on, in Sweden, III. 208.
Swede Midge (see *Contarinia nasturtii*).
Sweden, pests of cereals in, II. 453, III. 107; forests pests in, II. 54, 100, 168, 242, 243, III 47, 65, 147, 191, 255, 290-292, 435, 697, 767; control of *Hyponomeuta* spp. in, III. 250; miscellaneous insect pests in, I. 431, II. 419, III. 106, 107, 250, 279, 525, 566; pests of potato in, III. 435; spinning mites in, III. 252; strawberry pests in, III. 695.
swederi, Eucomys.
Swedish Fly (see *Oscinella frit*).
Sweet Bay (see *Laurus nobilis*).
Sweet Birch (see *Ceanothus integerrimus*).
Sweet Birch Scale (see *Chionaspis salicis-nigrae*).
Sweet Grass (see *Panicum laevifolium*).

Sweet Pea (*Lathyrus odoratus*), pests of, in France, II. 488, III. 279; pests of, in U.S.A., II. 536, III. 375, 423; not a food-plant of *Acyrthosiphon pisi*, in Russia, III. 703, 704.
Sweet Potato (*Ipomoea batatas*), pests of, intercepted in California, III. 420, 494, 625, 690; pests of, in Dutch East Indies, III. 644, 645; *Helopeltis* on, in Gold Coast, II. 671; pests of, in Natal, II. 503; *Herse convolvuli* on, in Nigeria, III. 167; pests of, in Philippines, I. 482; pests of, in Uganda, I. 49; pests of, in U.S.A., I. 217, 243, III. 419; pests of, in West Indies, I. 83, 254, 258, 329, II. 88, 533, III. 5, 22, 461, 468, 476, 477, 518.
Sweet Potato Caterpillar (see *Acraea terpsichore*).
Sweet Potato Hawk Moth (see *Protoparce cingulata*).
Sweet Potato Scarabee (see *Euscepes batatae*).
Sweet Potato Sphinx (see *Herse convolvuli*).
Sweet Potato Weevil (see *Cylas formicarius* and *Euscepes batatae*).
swezeyi, Eupelminus.
Swietenia mahogani, Pseudococcus filamentosus on, in E. Africa, II. 146.
Swift, destroying *Sitones hispidulus*, III. 380.
swinhoei, Trichophaga.
Switzerland, *Chermes* spp. in, III. 343, 593, 596; insect pests in, I. 189, 222, 223, 248, 260, 335, 336, 340, 393, 468; II. 127, 152, 229, 451, 605, 632, 680, 688, III. 94, 436, 524, 564, 740; legislation against importation of insect pests into, I. 224.
Sword Bean (see *Canavalia ensiformis*).
Syagrius intrudens (Australian Fern Weevil), acclimatisation of, in Ireland, II. 9.
Syagrus calcaratus, on cotton in Nigeria, II. 106, III. 164.
Syagrus puncticollis, on cotton in Africa, I. 414, II. 2, 579.
Sycamore (*Acer pseudoplatanus*), pests of, in Britain, I. 237, III. 633; *Chrysobothris femorata* on, in U.S.A., I. 280; not attacked by *Lymantria dispar* in U.S.A., III. 669.
Sycoecus thaumastocnema, sp. n., in wild fig in Uganda, III. 168.
Sycophaga nota, sp. n., in *Ficus nota* in Philippines, I. 341.
sycophanta, Calosoma.
Sycoryctes philippensis, sp. n., on figs in Philippines, I. 341.
Sycoscaptella angela, sp. n., from North Queensland, III. 358.
Sylepta, on *Monotes kerstingii* in Togo, I. 350.
Sylepta derogata (Cotton Leaf-roller) on cotton in E. Africa, I. 414, II. 1, 106, 277, 580, III. 124; on cotton in Far East, II. 491; on cotton in Nigeria, III. 164; parasitised by *Pleurotropis amaurocoela* in Nyasaland, III. 444.
sylvanus, Augiades (*Hesperia*).
sylvarum, Bombus.
sylvatica, Nyssa.
sylvestris, Dipsacus.
Symdobius albasiphus, sp. n., in Canada, II. 604.
Sympha agromyzae, parasite of *Agromyza pruinosa* in U.S.A., II. 307.
Sympherobius amicus, on olive in Africa, III. 432, 433.
Sympherobius angustus (Brown Lacewing), predaceous on mealy bugs in California, II. 437.
Sympherta mnemonicae, sp. n., parasite of *Mnemonica auricyanea* in U.S.A., III. 18.
symphiti, Aphis.
Symphyothrips punctatus, sp. n., on orange in Florida and Louisiana, III. 631.
Symphytum officinale, Aphis symphiti on, in Britain, III. 762.
Sympiesis, parasite of *Agromyza pusilla* in U.S.A., II. 46.
Sympiesis flavipes, parasite of *Acrocercops strigifinitella* in U.S.A., III. 415.
Sympiesis purpureus, sp. n., parasite of *Acrocercops ordinatella* in Ceylon, III. 443.
Synagris cornuta, parasitised by *Pleurotropis clinognathus* in W. Africa, III. 444.
Synanthedon (see *Aegeria*).
Synclera multilinealis (see *Sylepta derogata*).
Syneta albida, on fruit in Br. Columbia, I. 413, II. 676, 677; bionomics of, on apples, etc., in Oregon, I. 135, III. 257.
Syngamia abruptalis, on cotton in Africa, II. 1.
Syngrapha falcifera, on sunflowers in Colorado, III. 753.
Synistovalgus bifasciatus, on cotton in Africa, II. 1.
Synistovalgus hemipterus, on cotton in Africa, II. 2.
Syntexis libocedri, sp. n., on *Libocedrus decurrens* in U.S.A., III. 690.

Syntherisma sanguinalis, Prosopothrips cognatus on, in U.S.A., III. **577, 578.**
Syntomaspis, III. **727**; parasite of gall-fly in California, I. **36.**
Syntomis (see *Amata*).
Syntomosphyrum indicum, parasite of *Ceratitis capitata*, I. **549.**
Syntomosphyrum phaeosoma, sp. n., parasite of *Apanteles* in Nigeria, III. **444.**
Syntomosphyrum taprobanes, sp. n., parasite of *Scymnus* in Ceylon, III. **443.**
Syria, insect pests in, I. **139, 392,** II. **259, 419.**
syriacus, Lydus.
Syringa, pests of, in Holland, III. **198, 741.**
Syringa persicum, Clysia ambiguella on, in Russia, III. **210.**
Syringa vulgaris, Otiorrhynchus rotundatus on, in Germany, I. **121**; *Byturus tomentosus* on, in Russia, I. **206**; food-plant of *Aulacaspis pentagona*, I. **222.**
syringa, Argina.
syringae, Podosesia.
syringaria, Hygrochroa.
syringella, Gracilaria.
Syromastis (*Mesocerus*) *marginatus*, food-plants of, in Russia, III. **7, 479, 727**; destroying *Euproctis chrysorrhoea* in Russia, III. **220**; not parasitised by *Telenomus*, I. **449.**
syrphi, Perilampidea.
Syrphophagus mesograptae, parasite of Syrphids in Carolina, III. **25.**
Syrphus, predaceous on pests of cotton in Turkestan, II. **312.**
Syrphus aegyptius (see *Xanthogramma*).
Syrphus americanus, predaceous on Aphids in U.S.A., I. **242,** II. **599, 697.**
Syrphus annulipes, predaceous on *Brachycolus noxius* in Russia, III. **308.**
Syrphus auricollis, predaceous on *Brachycolus noxius* in Russia, III. **308.**
Syrphus balteatus, predaceous on Aphids in Astrachan, II. **358,** III. **220.**
Syrphus hyalinatus, predaceous on vine moths in France, I. **524.**
Syrphus nasutus, predaceous on *Aphis gossypii* in Nigeria, II. **107,** III. **164.**
Syrphus opinator, predaceous on Aphids in U.S.A., I. **242,** II. **527,** III. **142.**
Syrphus pyrastri (see *Lasiophthicus*).
Syrphus ribesii, predaceous on *Macrosiphum rosae* in U.S.A., II. **527.**
Syrphus ropalus, predaceous on *Venusia verriculata* and *Tortrix postvittana* in New Zealand, III. **722.**
Syrphus torvus, in England, II. **497.**
Systates cribripennis, on coffee in E. Africa, II. **570.**
Systates irregularis, on camphor, cinchona and coffee in E. Africa, I. **11, 414.**
Systates pollinosus, on cotton in Africa, I. **107, 414,** II. **2, 580.**
Systena blanda, on vegetables, etc., in U.S.A., I. **299.**
Systena frontalis, on vegetables, etc., in Canada, I. **299,** II. **664.**
Systena hudsonias, on potatoes in Quebec, II. **664**; food-plants of, in Quebec, III. **69.**
Systena marginalis, on hickory, oak, etc., in Canada, I. **299,** II. **664.**
Systoechus, parasitising locusts in Russia, I. **535,** II. **53.**
Systoechus nitidulus (see *Anastoechus*).
Syzygium guineense, not attacked by *Pseudococcus filamentosus* in E. Africa, II. **146.**
Syzygium jambolana, Aspidiotus destructor on, in E. Africa, II. **429.**

T.

tabaci, Aleurodes; *Thrips.*
tabaniforme, Paranthrene (*Sciapteron*).
tabanocida, Telenomus.
Tabby Moth (see *Aglossa pinguinalis*).
tabida, Leptodictya.
tabidus, Cephus; *Trachelus.*
tabulata, Chelinidea.
Tachardia albizziae, Hymenopterous parasites of, in Ceylon, I. **275**; on *Nephelium litchi* in Ceylon, II. **644.**
Tachardia aurantiaca, Eublemma predaceous on, in Java, I. **150.**
Tachardia lacca (Lac Insect), attempt to establish, in Ceylon, I. **89.**
tachardiae, Anastatus; *Encyrtus.*
Tachina, I. **114,** II. **528.**
Tachina larvarum, parasite of *Euproctis chrysorrhoea* in France, I. **270**; parasite of *Zygaena filipendulae* in U.S.A., I. **547**; parasite of Lepidoptera in Russia, I. **481, 540,** II. **212,** III. **138.**
Tachina mella, parasite of *Malacosoma* in U.S.A., I. **141.**

Tachina rustica, parasite of Lepidoptera in Russia, I. **481**, III. **138**.
Tachina winnertzi, parasite of *Dendrolimus pini* in Russia, II. **222**.
Tachinophyto (*Hypostena*), parasite of *Diatraea saccharalis* in Porto Rico, I. **184**, II. **48**.
Tachyporus jocosus, in colonies of *Leucotermes flavipes* in U.S.A., III. **379**.
taedata, Psyllobora.
Taeniocampa, various spp. of, parasitised by *Meteorus albiditarsis* in Britain, II. **270**.
Taeniopoda, on sugar-cane in Mexico, I. **184**.
Taeniopoda picticornis (Military Grasshopper), bionomics of, in Arizona, I. **179**, II. **542**.
taeniopus, Chlorops.
Taeniothrips primulae, in Britain, II. **488**.
Taeniothrips (*Euthrips*) *pyri* (Pear Thrips), and its control in orchards in Canada and U.S.A., I. **153**, **364**, **528**, II. **247**, **271**, **387**, **553**, III. **136**, **461–463**, **473**, **494**, **571**, **677**, **709**; on apple and pear in Crimea, I. **363**, II. **198**; legislation against, in Idaho, II. **344**.
Tagiades gana, on yams in Singapore, III. **724**.
Tahiti, coconut pests in, II. **690**; *Dacus zonatus* in, II. **116**; insect pests from, intercepted in California, III. **558**.
taitensis, Calandra (see *Diocalandra frumenti*).
talaca, Hyposidra.
Talc, an ingredient of dusting powder against vine pests, III. **562**.
Talipot Palm (*Corypha umbraculifera*), *Oryctes rhinoceros* on, in Straits Settlements, II. **99**.
Talis quercella, on cereals in Astrachan, III. **221**, **399**, **478**, **641**.
Talpa europaea (Common Mole), destroying Tipulid larvae in Britain, II. **706**; attempt to introduce into Samoa, against *Oryctes rhinoceros*, II. **28**.
Tamarack Sawfly, destroyed by *Perilloides modestus*, II. **665**.
tamaricis, Berginus; *Haltica* (see *H. erucae*).
Tamarind (*Tamarindus indica*), not attacked by *Ceratitis capitata* in Hawaii, I. **511**; *Helopeltis bergrothi* on, in Java, III. **662**; *Oxyrhachys tarandus* on, in India, II. **242**; not attacked by *Pseudococcus filamentosus* in E. Africa, II. **146**; not suitable for shading sorghum, II. **631**.
Tamarindus indica (see Tamarind).
Tamarix (Tamarisk), *Apate bimaculata* on, II. **196**; pests of, in Egypt, II. **505**, **506**.
tammeamea, Vanessa.
Tanacetum vulgare (see Tansy).
Tanagers, damaging fruit in Trinidad, II. **575**.
Tan-bark Oak (see *Pasania densiflora*).
Tan-bark Oak Scale (see *Aspidiotus densiflorae*).
Tangerine (*Citrus nobilis*), *Aleurodes citri* on, in Florida, III. **326**; *Ceroplastes sinensis* on, in France, II. **455**; *Anastrepha ludens* on, in Mexico, II. **77**; *Duomitus punctifer* on, in Nevis, III. **73**.
Tanglefoot, methods of applying, I. **373**, II. **34**; preparation of, I. **164**, **494**.
Tansy (*Tanacetum vulgare*), oil of, as an insecticide, I. **125**, III. **426**, **456**; probably not a food-plant of *Acyrthosiphon pisi* in Russia, III. **704**.
Tanymecus palliatus, on beet, etc., in Russia, I. **478**, **485**, II. **465**, III. **542**.
tapetzella, Trichophaga.
Taphrocerus gracilis, on oak in Carolina, I. **161**.
Taphrorhynchus (*Bostrychus*) *bicolor*, on walnut in Russia, III. **206**.
Tapinostola musculosa (see *Oria*).
taprobanes, Syntomosphyrum.
Tar, and alkalis, against Coccids, II. **695**; and caustic soda, used in Italy as an insecticide, I. **10**; against wood-boring beetles, I. **423**, III. **12**.
Tar Oil, formulae containing, I. **230**, **232**; tests with, against Aphids, II. **210**.
Tar-oil-soap Emulsion, method of preparing, III. **498**.
Taragama dorsalis, on tea and dadap in Ceylon, II. **643**, III. **61**.
Taragama siva, in India, III. **145**.
tarandus, Oryctes; *Oxyrhachys*.
Taraxacum officinale, *Phytomyza albiceps* on, in New Zealand, III. **722**; *Byturus tomentosus* on, in Russia, I. **206**.
tardus, Harpalus.
Targionia biformis (see *Chrysomphalus*).
Targionia cedri (see *Aspidiotus*).
Targionia sacchari, on sugar-cane in Porto Rico, I. **185**, **343**, II. **49**.
Targionia vitis, on vines in Europe, II. **609**.
Tarichium megaspermum, infesting *Euxoa segetum* in Russia, I. **462**.

Tarnished Plant Bug (see *Lygus pratensis*).
tarsale, Trogoderma.
tarsalis, Corymbites; Rhizotrogus.
tarsatorius, Homicidus.
tarsatus, Paltothyreus.
tarsicrinalis, Zanclognatha.
tarsiplumalis, Zanclognatha.
Tarsonemus ananas, on pineapple in Queensland, II. **152.**
Tarsonemus approximatus, on citrus in California, II. **152.**
Tarsonemus assimilis, on citrus in California, II. **152.**
Tarsonemus bancrofti (see *T. spinipes*).
Tarsonemus buxi, on box in Italy, II. **152.**
Tarsonemus culmicolus, on grasses in Finland, II. **152.**
Tarsonemus fragariae, in Norway, III. **108**; on strawberries in Sweden, III. **695.**
Tarsonemus latus, on mango in U.S.A., II. **152.**
Tarsonemus oryzae, on rice in Italy, II. **151.**
Tarsonemus pallidus, control of, on chrysanthemums, etc., in U.S.A., I. **101**, III. **372, 566.**
Tarsonemus spinipes, control of, on sugar-cane in West Indies, I. **98**, II. **151, 532**, III. **134, 651.**
Tarsonemus spirifex, in Denmark, III. **246, 698**; on oats in France and Germany, II. **151, 500**, III. **664, 665**; bionomics of, in Holland, III. **664, 665**; on cereals in Russia, I. **357.**
Tarsonemus translucens (Yellow Tea Mite), in Ceylon, I. **88**, II. **151.**
Tarsonemus waitei, on peach in U.S.A., II. **151**, III. **566.**
tartarus, Athous; Stauronotus,
taslei, Sphenostethus.
Tasmania, insect pests in, I. **320**, II. **66, 280, 401, 604**, III. **362, 366, 409, 410**; new Mymaridae from, III. **361**; plant quarantine in, I. **359.**
tasmaniae, Aspidiotus.
taurella, Ochsenheimeria.
tauricus, Otiorrhynchus.
tavaresi, Aphis.
Tavaresiella, in Portugal, III. **90.**
taxicola, Diaspis.
taxicornis, Labidostomis (*Clytra*).
taxifolia, Pseudotsuga.
taxifoliella, Rhyacionia (*Evetria*).
Taxus (see Yew).
Taxus baccata, Diaspis taxicola on, in Algeria, II. **92.**
Taxus cuspidata var. *brevifolia, Otiorrhynchus sulcatus* on, in U.S.A., II. **183.**
Tea (*Thea*), *Ceroplastes rubens* on, in Australia, III. **503**; pests of, in Ceylon, I. **87, 88, 351**, II. **150, 151, 152, 305, 306, 323, 512, 513, 597, 643, 644, 654, 671**, III. **61, 123, 157, 300, 666, 755**; pests of, in Far East, II. **490**; *Helopeltis* on, in Gold Coast, II. **671**; pests of, in India, I. **370**, II. **60, 151, 158, 430, 431, 654**, III. **65, 300, 444, 488**; pests of, in Java, II. **157, 430**, III. **434, 662**; pests of, in Nyasaland, II. **277**; pests of, in Trans-Caucasian Russia, III. **65**; *Ceroplastes vinsoni* on, in Réunion, II. **2, 6**; pests of, in Uganda and E. Africa, I. **49, 415**, II. **59**; *Pseudaonidia duplex* intercepted on, in U.S.A., from Japan, III. **455**; literature of pests of, I. **548**, II. **316.**
Tea, Appalachian, not attacked by *Lymantria dispar* in U.S.A., III. **669.**
Tea Leaf-miner (see *Oscinis theae*).
Tea Mite (see *Tetranychus bioculatus*).
Tea Mite, Yellow (see *Tarsonemus translucens*).
Tea Mosquito (see *Helopeltis theivora*).
Tea Tortrix (see *Homona coffearia*).
Tea Tree (*Leptospermum*), *Hyalarcta hübneri* on, in Australia, II. **493.**
Teak (*Tectona grandis*), pests of, in E. Africa, II. **146, 429**; *Zeuzera coffeae* on, in Ceylon, II. **151**; Lepidopterous pests of, in Dutch East Indies, III. **645**; pests of, in India, III. **723**; immune to attack of termites, III. **279.**
Teasel, *Macrosiphum rudbeckiae* on, in California, II. **251.**
Teasel Aphis (see *Aphis ochropis*).
Technomyrmex albipes, associated with scale-insects in Seychelles, I. **474**, II. **567**, III. **410, 627.**
Tecoma leucoxylon (White Wood), *Duomitus punctifer* on, in Barbados, II. **533**, III. **73.**
tecta, Pulvinaria.
Tectona grandis (see Teak).
tectonae, Aspidiotus.
Tectocoris lineola var. *cyanipes*, on cotton in Bismarck Archipelago, I. **349.**
tectus, Ptinus.
tecumanus, Rhigopsidius.
tedella, Eucosma (*Epiblemma, Grapholitha, Tinea*).
Teff Grass, *Toxoptera graminum* on, in S. Africa, II. **153.**
tegalensis, Chionaspis.
Tegenaria atrica, preying on bees in Russia, II. **65.**

Tegrodera erosa, on lucerne in Arizona, III. **512.**
Teia anartoides, on cherry, apple, etc., in Australia, III. **492.**
tekkensis, Mylabris.
telarius, Tetranychus (*Acarus*).
Teleas zetterstedti (see *Telenomus truncatus*).
telenomicida, Encyrtus.
Telenomus, I. **534**; parasite of *Erinnyis ello* in Trinidad, III. **367**; parasite of *Diatraea* spp., etc., in Br. Guiana, I. **184, 521, 522**, III. **383.**
Telenomus acrobates, III. **439**; parasite of *Chrysopa* in France, II. **91.**
Telenomus chrysopae, sp. n., parasite of *Chrysopa* in Russia, III. **439.**
Telenomus dilophonotae, parasite of *Erinnyis ello* in Br. Guiana, II. **568.**
Telenomus eurydemae (see *Aphanurus*).
Telenomus gowdeyi, parasite of *Anaphe* in Uganda, II. **548.**
Telenomus gracilis, parasite of *Dendrolimus segregatus* in Russia, II. **223.**
Telenomus heliothidis, I. **515.**
Telenomus howardi (see *Hadronotus*).
Telenomus orgyiae, parasite of *Orgyia antiqua* in U.S.A., III. **268.**
Telenomus phalaenarum, parasite of *Euproctis chrysorrhoea* and *Phytometra gamma*, I. **270**, II. **394**, III. **542**; not a parasite of *Dendrolimus pini*, II. **222.**
Telenomus quaintancei, parasite of *Aegeria exitiosa* in U.S.A., II. **120.**
Telenomus rufiventris, parasite of Rhynchota in Russia, I. **449.**
Telenomus saccharalis, sp. n., in Java, III. **62.**
Telenomus semistriatus, parasite of *Eurygaster* spp. in Russia, I. **449, 451**, III. **401.**
Telenomus simoni, parasite of *Eurygaster* spp. in Russia, I. **449, 451.**
Telenomus sokolovi, parasite of Rhynchota in Russia, I. **449, 451**, III. **401.**
Telenomus sphingis, parasite of *Datana integerrima* in U.S.A., I. **525.**
Telenomus tabanocida, sp. n., in Trinidad, II. **288.**
Telenomus terebrans, parasite of *Malacosoma neustria* in Russia, I. **208.**
Telenomus truncatus (*Teleas zetterstedti*), parasite of *Dasychira pudibunda* in Holland, III. **196.**
Telenomus umbripennis, parasite of *Dendrolimus* spp. in Russia, II. **222.**
Telenomus vassilievi, parasite of Rhynchota, in Russia, I. **449–450.**
Teleonemia australis (Olive Bug), remedies against, in S. Africa, II. **298**, III. **502.**
Teleonemia lantanae (Lantana Leaf-bug), in bait-traps for *Ceratitis capitata*, III. **568**; introduced into Hawaii to destroy lantana, III. **757.**
Teleopterus notandus, sp. n., parasite of *Dacus oleae* in Eritrea, III. **173, 432.**
Telephorus basicornis, on cotton in Bismarck Archipelago, I. **349.**
Telicota augias, on sugar-cane and rice in India and Far East, II. **67, 68, 489, 490.**
Temnorrhinus brevirostris, on salsola in France, II. **90.**
Temnorrhinus mendicus (see *Conorrhynchus*).
Temnorrhynchus sansibaricus, on coconut in E. Africa, I. **414.**
Temnoschoita quadrimaculata, on coconut in Nigeria, II. **108.**
tenax, Pemphredon (*Ceratophorus*).
tenebricosa, Capnodis.
tenebricosus, Atractodes; *Chrysomphalus.*
Tenebrio molitor (Yellow Mealworm), declared a pest in Br. Columbia, I. **48**; in bran and flour, in France, III. **694**; in grain in Russia, II. **40, 503**, III. **221**; in stored grain in U.S.A., I. **115**, III. **298.**
Tenebrio obscurus, bionomics of, in U.S.A., III. **463.**
tenebrioides, Zabrus.
tenebrionis, Capnodis.
Tenebroides corticalis, predaceous on *Cydia pomonella* and other Lepidopterous larvae in U.S.A., III. **476, 655, 718.**
Tenebroides (*Trogosita*) *mauritanicus*, I. **387**; in cotton seed in Africa, II. **2, 579**; in stored grain in E. Africa, I. **414**; in stored maize in Nigeria, III. **166**; damaging grain, in Russia, II. **40, 503**, III. **601**; damaging army biscuits, I. **292**; controlled by heat, I. **152.**
tenebrosus, Corymbites.
tenella, Botrytis; *Eutettix*; *Galerucella.*
Tennessee, diseases of bees in, II. **14**; legislation against insect pests in, III. **657**; insect pests in, I. **265, 295, 352, 429**, II. **280, 601**, III. **516, 549.**
Tenodera sinensis, on umbrella pine from Japan, II. **186.**
Tent Caterpillar (see *Malacosoma americana* and *M. disstria*).

tenthredinarum, Pezoporus.
tenthredinis, Mesoleius.
Tenthredo bipunctata (see *Ardis*).
Tenthredo linda (see *Ardis bipunctata*).
Tentyria nomas, on melons, etc., in Russia, III. **221.**
tenuicorne, Agryphon.
tenuicornis, Frankliniella ; *Labrorychus* (*Anomalon*) ; *Riptortus.*
tenuiformis, Franklinothrips.
tenuimaculatus, Adoretus.
Tenuipalpus, on citrus in Sicily, III. **144.**
Tenuipalpus banksi, sp. n., bionomics of, in U.S.A., III. **306.**
Tenuipalpus bioculatus, sp. n., on privet and strawberry in U.S.A., III. **306.**
Tenuipalpus californicus, in California, II. **306.**
Tenuipalpus palmatus, II. **505.**
Tenuipalpus pulcher, II. **505.**
Tenuipalpus quinquenychus, sp. n., on castor bean in U.S.A., III. **306.**
Tenuipalpus yothersi, sp. n., food-plants of, in U.S.A., III. **306.**
tenuipes, Angitia.
tenuis, Eriophyes ; *Leucotermes.*
Tephraea dichroa, in Rhodesia, III. **174.**
Tephrina arenacearia, parasitised by *Habrobracon plotnikovi* in Russia, II. **424.**
Tephrina contexta, on cotton in Africa, II. **1.**
Tephritis bardanae, on Jerusalem artichoke, III. **33,**
Tephritis cincta, on Jerusalem artichoke, III. **33.**
Tephritis confusa (see *T. cincta*).
Tephritis (*Trypeta*) *leontodontis*, on Jerusalem artichoke, III. **33.**
Tephroclystis alliaria (see *Eupithecia*).
Tephrosia candida, pests of, in Ceylon, III. **83** ; attacked by locusts in Bengal, III. **755.**
Tephrosia purpurea, Chionaspis citri on, in Br. Guiana, I. **130.**
Teras contaminata (see *Oxygrapha*).
Teras minuta, in Missouri, I. **281.**
Terastia meticulosalis, on *Erythrina* in Ceylon, II. **644,** III. **62** ; on coffee in Far East, II. **490.**
terebrans, Prophanurus ; *Telenomus.*
Teredon, in N. America, I. **255.**
Teretrius, predaceous on *Sinoxylon sexdentatum* in France, III. **10.**
tergestinus, Aeolopus.
Termes badius, destroying buildings in Africa, III. **757** ; on coffee and rubber in E. Africa, I. **105, 414, 477.**
Termes bellicosus, damaging rubber and coffee in Africa, I. **49,** II. **447;** on cloves in Zanzibar, III. **124.**
Termes carbonarius, on rubber in Malaya, II. **133.**
Termes flavipes, in Arizona, III. **512.**
Termes formosanus, attacking buildings in Formosa, II. **190.**
Termes gestroi (see *Coptotermes*).
Termes lactis, in Victoria, II. **119.**
Termes latericius, on rubber in E. Africa, I. **477.**
Termes lucifugus (see *Leucotermes*).
Termes monodon, on rubber in E. Africa, I. **477.**
Termes morio (see *Eutermes*).
Termes natalensis, on rubber in E. Africa, I. **414, 476,** II. **283** ; destroying buildings in Africa, III. **757.**
Termes obscuriceps, in Ceylon, I. **74.**
Termes redemanni, in Ceylon, I. **74.**
Termes redenianus, on rubber in E. Africa, I. **477.**
Termes sulphureus, on rubber in Malaya, II. **133.**
Terminalia, not attacked by *Pseudococcus filamentosus* in E. Africa, II. **146.**
Terminalia catappa (African Almond), pests of, in Ceylon, II. **597, 654** ; *Ceratitis capitata* on, in Hawaii, I. **510,** II. **115** ; bagworms on, in Zanzibar, III. **125.**
terminalis, Metapodius ; *Trichothrips.*
terminatus, Dinocampus.
Termites, collected on the Abor Expedition, II. **688** ; in Tropical Africa, II. **255,** III. **174, 648** ; new, from W. Africa, II. **610** ; new, from Australia, III. **750** ; distribution of, in France, II. **657** ; intercepted in Hawaii, from California, III. **657** ; new, from India, I. **525** ; in India, III. **146, 300, 489** ; attacking fruit trees in New South Wales, III. **751** ; in zoological collections in Turkestan, III. **633** ; distribution of, in West Indies, II. **284** ; methods of controlling, I. **12, 74, 89, 465, 466, 477, 513, 526,** II. **73, 157, 190, 512, 597,** III. **165, 174, 378, 504** ; varieties of wood immune to attacks of, III. **379.**
terpsichore, Acraea.
Terrapin Scale (see *Eulecanium nigrofasciatum*).
terrestris, Bombus.
terryi, Aphycus.
tersa, Xylophanes.
tessellata, Euxoa ; *Peleteiria* ; *Prociphilus.*

Tessellated Shield Scale (see *Eucalymnatus tessellatus*).
tessellatum, Lecanium (see *Eucalymnatus tessellatus*); *Oncideres*; *Xestobium* (see *X. rufovillosum*).
tessellatus, Eucalymnatus.
tesserata, Pseudaonidia.
tessmanni, Udamostigma.
testacea, Luperina (*Apamea*).
testaceipes, Andricus; *Lysiphlebus* (*Aphidius*); *Pleurotropis.*
testaceum, Lasioderma.
testaceus, Adoretus; *Laemophloeus*; *Phycus.*
testudinaria, Hyphoraia.
testudinea, Hoplocampa.
testulalis, Maruca.
Tetracha carolina, predaceous on *Laphygma frugiperda* in U.S.A., I. **518.**
Tetragnatha extensa, attacking bees in Russia, II. **65.**
Tetralobus, on cotton in Africa, II. **1.**
Tetralobus flabellicornis, on rubber and coconut in E. Africa, I. **414**, II. **415.**
Tetramorium caespitum (Pavement Ant), on cabbage in N. Italy, III. **124**; *Apocellus sphaericollis* mistaken for, in U.S.A., III. **549.**
Tetraneura graminis, food-plants of, in Colorado, III. **351.**
Tetraneura lucifuga, on sugar-cane in Mauritius, I. **31.**
Tetraneura pallida (see *Eriosoma*).
Tetraneura rubra, on grain in Russia, II. **171**, III. **45, 226, 541, 601.**
Tetraneura ulmi, on grain in Russia, II. **171**; on elms in Russia, III. **45, 227, 541, 610**; on elms in Norway, III. **697**; on elms in Holland, III. **200.**
Tetraneura ulmisacculi (English Elm Pouch Gall), in Canada and U.S.A., III. **474, 552.**
Tetranychopsis, on coconut in South Sea Islands, II. **3.**
Tetranychus (Red Spider), on cotton in Africa, II. **2**; on ivy in Austria, II. **482**; in orchards in Australia, III. **408, 527**; bionomics and control of, in Canada and U.S.A., I. **143, 240, 413**, II. **287**, III. **63, 551**; in European vineyards, II. **421, 539**; on sugar-cane in Porto Rico, III. **134**; unsuitable for introduction into Queensland against prickly pear, III. **127**; on fruit trees, etc., in Russia, III. **44, 219, 338, 391**; imported into U.S.A. from Belgium and Holland, III. **513**; natural enemies of, I. **143**, II. **33**, III. **134, 356, 725**; measures against, II. **209, 482, 563, 603**, III. **391, 557, 622, 651, 676**; larvae of, compared with those of *Bryobia*, II. **169.**
Tetranychus altheae, in Holland, III. **201**; food-plants of, in Sweden, III. **253.**
Tetranychus bicolor (see *Neotetranychus*).
Tetranychus bimaculatus (see *T. telarius*).
Tetranychus bioculatus (Tea Mite), on tea and camphor in Ceylon, II. **306, 597**, III. **489**; bionomics of, on jute, etc., in India, I. **508**; in Java, III. **632, 713.**
Tetranychus borealis, III. **253.**
Tetranychus carpini, III. **201.**
Tetranychus desertorum, III. **253.**
Tetranychus exsiccator (Sugar-cane Mite), in Java, III. **632.**
Tetranychus flavus, III. **253.**
Tetranychus gloveri (see *T. telarius*).
Tetranychus ludeni, III. **253.**
Tetranychus major, on limes in France, I. **103.**
Tetranychus mytilaspidis (see *Schizotetranychus*).
Tetranychus pilosus (see *Paratetranychus*).
Tetranychus sexmaculatus (see *T. telarius*).
Tetranychus simplex (see *Paratetranychus*).
Tetranychus telarius (*bimaculatus, gloveri, sexmaculatus*) (Red Spider, Spinning Mite), in Australia, II. **584**; control of, in Britain, III. **14, 100, 287, 746**; bionomics and control of, in Canada, I. **90, 405**, II. **492, 512, 676**; in Ceylon, II. **151**; in Egypt, II. **505**; control of, on vines, etc., in France, I. **235**, II. **420**, III. **522**; on roses, etc., in Holland, II. **642**, III. **201**; on vines in Italy, III. **124, 387**; bionomics of, in Java, III. **632**; on plums in Norway, III. **108, 696**; on cotton, beet, etc., in Russia, I. **487, 527**, II. **311, 313, 502, 521, 701, 716**, III. **219, 223, 398, 401, 606**; on citrus in Sicily, II. **268**; food-plants of, in Sweden, III. **252, 254**; bionomics and control of, in U.S.A., I. **101, 144, 240, 269, 353**, II. **82, 151, 663, 703. 704, 707, 708**, III. **63, 144, 179, 180, 269, 327, 444, 471, 515, 566, 570, 622, 738, 761**; on sweet potatoes in West Indies, II. **88, 533**; distribution and habits of, III. **13**; natural

enemies of, I. 144, III. 137, 269, 570; synonymy of, I. 241, III. 63, 144, 253.
Tetranychus tumidus, III. 253.
Tetranychus ununguis (see *Paratetranychus*).
Tetranychus weldoni, III. 253.
tetraonis, Arbela.
Tetraonyx quadrimaculatus, food-plants of, in N. Carolina, I. 243.
tetrarhodus, Myzus.
Tetrastia meticulosalis, on dadap in Ceylon, II. 644.
Tetrastichodes, I. 549.
Tetrastichodes asthenogmus, sp. n., parasite of cockroach in Ceylon, III. 443.
Tetrastichus, parasite of *Ceratitis capitata* in W. Africa, II. 317; parasite of gall-fly in California, I. 36; parasite of *Tachardia albizziae* in Ceylon, I. 275; in Hawaii, III. 712; parasite of *Cassida vittata* in Italy, III. 6; parasite of *Hyponomeuta malinellus* in Russia, III. 481; parasite of *Hypera murina* in Russia, II. 109; parasite of *Melasoma scripta* in U.S.A., III. 162; in juniper berries in U.S.A., III. 581.
Tetrastichus agrili, sp. n., parasite of *Agrilus sinuatus* in U.S.A., III. 249.
Tetrastichus asparagi, bionomics of, I. 15, II. 599, III. 237, 621.
Tetrastichus atrocoeruleus, parasite of *Hylotoma pagana* in Russia, III. 47.
Tetrastichus carinatus, parasite of *Mayetiola destructor* in U.S.A., I. 528, II. 225.
Tetrastichus coccinellae, parasite of *Coccinella septempunctata* in Russia, I. 458.
Tetrastichus compsivorus, sp. n., parasite of *Compsus auricephalus* in U.S.A., III. 249.
Tetrastichus dacicida, sp. n., parasite of *Dacus bipartitus* in Kamerun, III. 433.
Tetrastichus eriophyes, parasite of *Eriophyes ribis* in Germany, II. 297.
Tetrastichus euonymellae, parasite of *Hyponomeuta malinellus* in Russia, I. 347.
Tetrastichus euplectri, sp. n., parasite of *Euplectrus platyhypenae* in Louisiana, III. 151.
Tetrastichus gentilei, parasite of *Phloeothrips oleae* in France, II. 488.
Tetrastichus giffardi, parasite of *Ceratitis* spp. in W. Africa, I. 388, II. 672, III. 169; bred and liberated in Hawaii, III. 289, 364, 374, 412, 413, 493, 549.
Tetrastichus giffardianus, sp. n., parasite of *Ceratitis giffardi* in W. Africa and Dahomey, III. 433.
Tetrastichus gowdeyi, parasite of *Pulvinaria jacksoni* in Uganda, II. 59.
Tetrastichus gravens, sp. n., parasite of *Philippia chrysophyllae* in Eritrea, III. 433.
Tetrastichus hagenowii, in bait-traps for *Ceratitis capitata*, III. 568.
Tetrastichus maculifer, sp. n., parasite of *Dacus oleae* in Eritrea, III. 173, 433.
Tetrastichus melichlorus, sp. n., from Gold Coast, III. 444.
Tetrastichus productus, parasite of *Mayetiola destructor* in U.S.A., II. 225.
Tetrastichus sicarius, sp. n., parasite of *Chionaspis olivina* in Eritrea, III. 433.
Tetrastichus stictococci, sp. n., parasite of *Stictococcus diversiseta* in Gold Coast, III. 433, 434.
Tetrastichus venustus, sp. n., from lucerne infested with *Bruchophagus funebris* in U.S.A., III. 151.
Tetroda histeroides, on rice in Far East, II. 489; on rice in India, II. 69.
Tetropium, on Douglas fir in U.S.A., III. 670.
Tetropium castaneum, destroyed by *Picus major*, II. 148.
Tetropium gabrieli var. *crawshayi*, on larch in England, III. 190.
Tetropium oreinum, erroneously recorded as *Trinophylum cribratum* in India, III. 706.
Tetrops praeusta, on pears, etc., in Russia, II. 468, III. 221.
Tettigonia (Decticus) albifrons, control of, in Italy and Sicily, III. 40, 497.
Tettigonia similis, on sugar-cane in Porto Rico, I. 185.
Tettigonia (Decticus) verrucivora, in Russia, III. 401.
Tettigoniella spectra, on rice in S. India, II. 69.
texana, Euphosoma; Scudderia.
texanus, Chelonus; Trichochrous.
Texas, *Anthonomus grandis* in, I. 186, II. 79, 649, III. 590; value of birds in, II. 576; parasites of *Cirphis* spp. in, III. 683, 684; *Galleria melonella* in, I. 453, II. 379; control of grasshoppers in, II. 518, 519, III. 297; insect

pests in, I. 80, 161, 430, 455, II. 254, 279, 280, 558, 664; III. 151, 179, 330, 475, 566, 573; pests of Sudan Grass in, III. 451; *Trichogramma minutum* parasite of *Diatraea saccharalis* in, III. 26, 761.
Texas Boll Weevil (see *Anthonomus grandis*).
Texas Fever Tick, in Tennessee, I. 266.
textor, Hyphantria.
thais, Prophanurus.
thalassinus, Aeolopus (*Epacromia*).
Thalessa, destroying *Tremex columba* in U.S.A., II. 697.
Thalpochares scitula (see *Eublemma*).
Thamnonoma (*Halia*) *wavaria* (V-moth), on currants, etc., in England and France, I. 236, II. 621.
Thamnotettix, parasitised by Dryinidae, III. 467.
Thanasimus formicarius, in galleries of bark-beetles in Sweden, II. 100.
Thanatophilus rugosus, on sugar-beet in Britain, III. 542.
Thanatophilus sinuatus, on sugar-beet in Russia, III. 542.
Thaneroclerus girodi, predaceous on *Lasioderma serricorne*, I. 525.
Thaspium arvense, Phyllotreta nemorum on, in Russia, I. 210.
thaumastocnema, Sycoecus.
thaumatonotus, Basiliocephalus.
Thaumetopoea (*Cnethocampa*) *herculeana*, on cereals, etc., in Tunis, I. 199.
Thaumetopoea pityocampa, on *Pinus maritima* in Portugal, I. 313.
Thea chinensis (see Tea).
Thea vigintiduopunctata (see *Halyzia*).
Thea viridis, Pulvinaria theae on, in Australia, III. 503.
theae, Eriophyes; Fiorinia; Oscinis; Parlatoria; Pulvinaria; Ripersia.
theaecola, Ceylonica.
Thecabius (*Pemphigus*) *populicaulis, Phylloxera populariа* in old galls of, in California, III. 686; on willows in Maine, I. 467; confined to Central and Eastern U.S.A., III. 351.
Thecabius (*Pemphigus*) *populiconduplifolius*, bionomics of, on willows and poplars in U.S.A., I. 467, II. 343, III. 351.
Thecla agra, introduced to destroy lantana in Hawaii, III. 757.
Thecla betulae, parasitised by *Trichogramma* in Russia, III. 640, 641.
Thecla echion, introduced to destroy lantana in Hawaii, III. 757.
theivora, Helopeltis.
Thelephora, Aulacaspis pentagona associated with, III. 85.
Thelia bimaculata, life-history of, in U.S.A., III. 580.
Theobroma cacao (see Cacao).
Theobroma cacao var. *creollo, Stictococcus dimorphus* on, in Uganda, III. 288.
Theobroma cacao var. *foresteiro, Stictococcus dimorphus* on, in Uganda, III. 288.
theobroma, Sahlbergella.
theobromae, Tineopsis; Toxoptera.
Therapha hyoscyami, on *Hyoscyamus* and sunflowers in Russia, III. 7.
Thercladodes kraussi, life-history of, in S. Africa, I. 279.
Theretra neriifolia, not attacked by *Pseudococcus filamentosus* in E. Africa, II. 146.
Theretra nessus, on yams in Singapore, III. 724.
Thereva egressa, enemy of wireworms in U.S.A., III. 300.
Theridion differens, destroying larvae of *Tortrix fumiferana* in U.S.A., I. 202.
Theridion spirale, destroying larvae of *Tortrix fumiferana* in U.S.A., I. 202.
Theridium placens, predaceous on walnut Aphids in U.S.A., III. 142.
Therina, on hemlock in Vancouver, III. 19.
Therina (*Ellopia*) *somniaria*, in Br. Columbia, I. 87.
theristis, Pammene.
Thermesia gemmatalis (see *Anticarsia*).
Thermobia domestica, bionomics and control of, in U.S.A., III. 587.
Thermopteryx elasticella, on *Funtumia* in S. Nigeria, II. 108.
Theronia, II. 214.
Theronia americana, parasite of *Vanessa californica* in U.S.A., I. 177.
Theronia flavicans, parasite of *Lymantria dispar* in Crimea, I. 481; hyperparasite of *Dendrolimus pini* in Russia, II. 222.
Thersilocus moderator, parasite of *Coeliodes fuliginosus* in Russia, III. 640.
theutis, Cryptomeigenia.
Theutras pallidus, on coconut in South Sea Islands, II. 3.
Thielavia pisicola, on peas in France I. 102.
Thielaviopsis, carbolineum emulsion against, III. 319.
Thimbleberry (*Rubus nutkanus*), *Amphorophora rubicola* on, in California, II. 251.

Thiodina puerperis, attacking *Scudderia furcata* in California, III. **653.**
Thistle, *Xanthoecia flavago* on, in Britain, I. **434**; *Pyrrhocoris apterus* on, in Russia, III. **7**; *Diabrotica longicornis* on, in U.S.A., I. **429**; Aphids on, II. **494**, III. **9**, **132**; as a trap-crop for *Epicometis hirtella*, II. **374**; (see *Carduus*).
Thistle, Creeping or Corn (*Cnicus arvensis*), *Acidia heraclei* on, in Wales, II. **627.**
Thistle, Russian, *Pyrameis* (*Vanessa*) *cardui* on, in U.S.A., III. **262.**
Thistle Butterfly (see *Pyrameis cardui*).
Thliptoceras octoguttale, on coffee in E. Africa, I. **105**, **414.**
thoas, Papilio.
Tholera popularis (*Charaeas graminis*), in Russia, II. **197**, III. **111.**
Thomasia (*Clinodiplosis*) *oculiperda*, on roses, etc., in Britain, III. **74**; on roses in France, I. **424**; on roses in Russia, II. **719.**
Thomisus albus (see *T. onustus*).
Thomisus citreus (see *Misumena vatia*).
Thomisus onustus, destroying bees in Russia, II. **64.**
thomsoni, Entedon.
thoracica, Cassida.
thoracicus, Mesostenus.
Thorn Apple (see *Datura stramonium*).
Thosea cana (Green Nettle Grub), on castor in India, II. **654.**
Thosea cervina (Nettle Grub), on tea, etc., in India and Ceylon, II. **654**, III. **489.**
Thosea recta, on *Albizzia* in Ceylon, II. **654.**
Thosea sinensis, on tea and coffee in Far East, II. **490.**
thrax, Erionota.
Three-cornered Alfalfa Hopper (see *Stictocephala festina*).
Thricolepis inornata, on fruit trees in U.S.A., II. **555**, III. **271.**
Thrinax, Chionaspis unilateralis on, in Barbados, II. **533.**
Thripoctenus brui, parasite of *Kakothrips robustus* in France, II. **396**, **488**, III. **280.**
Thripoctenus russelli, parasite of thrips, II. **488.**
Thrips, causing onion white blast in Queensland, III. **289**; list of, from Russia, II. **266**; distributing pear blight in U.S.A., III. **149**; classification and new species of, I. **149**, **343**, **515**, II. **104**, **130**, **193**, **271**, **308**, III. **279**, **411**, **631**; feeding habits of, III. **571**; measures against, I. **217**, II. **69**, **70**, **117**, **161**, **188**, **194**, **279**, **311**, **381**, **459**, **460**, **705**, **707**, III. **25**, **97**, **470**, **489**, **490**, **505**, **650**, **651.**
Thrips, Cacao (see *Heliothrips rubrocinctus*).
Thrips, Onion (see *Thrips tabaci*).
Thrips, Pear (see *Euthrips pyri*).
Thrips, Potato (see *Thrips tabaci*).
Thrips, Red-banded (see *Heliothrips rubrocinctus*).
Thrips cerealium (see *Limothrips*).
Thrips decora, on oats in France, III. **428.**
Thrips flavus, bionomics of, on cotton in S. Russia, II. **311**, **716.**
Thrips frumentarius (see *Haplothrips aculeatus*).
Thrips haemorrhoidalis, remedy for, on cyclamen, III. **400.**
Thrips physapus (see *Kakothrips robustus*).
Thrips pisivora (see *Kakothrips robustus*).
Thrips tabaci (Onion Thrips, Potato Thrips), on potatoes and fruit in Australia, II. **117**, **705**, III. **491**; bionomics and control of, in Britain, III. **14**, **279**; on leeks in France, II. **278**, **420**; in Hawaii, III. **363**; on onions in Porto Rico, III. **476**; in Rhodesia, III. **618**; on onions and garlic in Russia, III. **544**; bionomics and control of, in U.S.A., II. **161**, **188**, **278**, **381**, **680**, III. **330**, **570**, **690**; parasitised by *Thripoctenus russelli*, II. **488.**
Thrips validus, on beans in Britain, III. **279.**
Thrushes, economic value of, I. **305**, II. **227**, **584**, **585.**
Thryptocera pilipennis, parasite of *Tortrix viridana* in Britain, II. **620.**
thuiella, Argyresthia.
Thuja (Arborvitae), *Eleutheroda dytiscoides* on, in Hawaii, III. **411**; gipsy moth imported on, from Japan, I. **401**; pests of, in U.S.A., II. **251**, III. **515**, **546**; *Aspidiotus perniciosus* on, I. **472**; not attacked by *Lymantria dispar* in U.S.A., III. **669.**
Thuja orientalis (Chinese Arborvitae), *Pseudococcus ryani* on, in California, II. **436**; *Lachniella thujafolia* on, in Transvaal, II **276.**
thujafolia, Lachniella.
thujafolinus, Lachnus.
thunbergiana, Pueraria.

Thurberia thespesioides (Arizona Wild Cotton), *Anthonomus grandis thurberiae* on, in Arizona, etc., II. 78, 272, 583, 624, 650, III. 545, 691; *Bucculatrix thurberiae* on, III. 513.
Thurberia Boll-worm (see *Sacadodes pyralis*).
thurberiae, Anthonomus grandis; *Calliephialtes.*
thurberiella, Bucculatrix.
Thuya (see *Thuja*).
Thymaris slingerlandana, parasite of *Polychrosis viteana* in U.S.A., I. 112.
Thymelicus magdalis, in Cuba, III. 134.
thymifolia, Tylopsis.
Thymol, and resin, against *Polychrosis botrana*, II. 411.
Thyridopteryx ephemeraeformis (Bagworm), III. 13; intercepted on orchids in California, III. 626; bionomics and control of, in orchards in U.S.A., I. 54, 280, III. 182, 193, 515.
Thyris fenestrella (*fenestrina*), on Jerusalem artichoke, III. 33.
thyrsis, Gangara.
Thyrsocera cincta, destroying Argentine ants, I. 327.
tibialis, Angitia (*Limnerium*); *Chaetocnema*; *Exochus*; *Haplothrips*; *Laelius*; *Phanerotoma*; *Polyphemothrips*; *Sitones.*
Tibicen septemdecim (Periodical Cicada), bionomics and control of, in U.S.A., I. 134, II. 433, III. 278; gall-midge reared from, III. 134.
Tibraca limbativentris, on rice in Br. Guiana, II. 568.
Tick Bird (see *Crotophaga ani*).
Tigridia pavonia, Olethreutes hebesana on, in Canada and U.S.A., III. 659.
tigrinus, Cyphocleonus; *Rhopalus* (*Brachycarenus*).
tigris, Amphicallia.
Tilia (see Lime).
Tilia americana (see Basswood).
tiliae, Aphis.
tiliae var. *leiosoma, Eriophyes.*
Tilletia secalis, infesting rye in Russia, II. 265.
Tillus, predaceous on *Sinoxylon sexdentatum* in France, III. 10.
Tillus elongatus, predaceous on *Ptilinus pectinicornis* in Sweden, III. 256.
Tillus unifasciatus, predaceous on *Apate*, II. 196.
timidus, Micromus.
Timothy Grass (*Phleum pratense*), *Clidogastra flavipes* on, in Norway, III. 107; pests of, in Canada and U.S.A., I. 401, II. 45, 121, 491, 693, III. 426, 509, 529, 551, 630; pests of, in Russia, II. 259, 371.
tincta, Metopia.
Tinea, on olives in France, I. 229; on coconut in South Sea Islands, II. 3.
Tinea aillela, II. 542.
Tinea anonella (see *Stenona*).
Tinea biselliella (see *Tineola*).
Tinea capitella (see *Incurvaria*).
Tinea fuscipunctella, in Crimea, III. 613.
Tinea granella (European Grain Moth, Wolf Moth), in New York, III. 475; damaging grain in Russia, II. 33, 41, 515; not found in army biscuits, I. 293; destroyed with carbon bisulphide in biscuit stores, III. 402; damaging wine corks, I. 506.
Tinea oleae (see *Prays oleellus*).
Tinea pellionella (Clothes Moth), bionomics and control of, III. 335, 509, 559, 633.
Tinea tedella (see *Eucosma*).
Tineola biselliella, II. 270; in houses in Astrachan, III. 220; bionomics and control of, III. 509, 692; probably an enemy of *Tetranychus telarius*, III. 64; parasitised by *Phygadeuon rusticellae*, III. 256.
Tineopsis theobromae, infesting cacao beans in U.S.A., I. 306, III. 663.
Tingis (*Tropidochila*) *pilosa*, on barley in Stavropol, III. 479.
Tingis pyri, on pear in France, II. 539; on pear in Italy, III. 124; control of, in orchards in Russia, I. 357, 536, II. 35, 43, 44, 718, III. 45, 51, 183, 220, 223, 393, 398, 401.
Tingis rhododendri, on rhododendrons etc. in Holland and Japan, II. 641, III. 743.
Tingis ulmi, in Astrachan, II. 614.
Tiphia femorata, hosts of, in Russia, II. 260.
Tiphia inornata, parasite of *Lachnosterna* in U.S.A., I. 528, II. 121, III. 87, 88.
Tiphia morio, parasite of *Anisoplia austriaca* in Russia, II. 260.
Tiphia parallela, attempted introduction of, into Mauritius, II. 32, 612, III. 731, 756; parasite of *Phytalus smithi* in West Indies, I. 98, 253, 254, II. 532, III. 500.
Tipula (Crane-fly, Leather Jacket), I. 505; on barley in Germany, II. 500; on grass-land in Holland, III. 200, 742; in Russia, I. 495; in Scotland, III. 715;

destroyed by birds, II. 147; destroyed by *Talpa europea*, II. 706.
Tipula angustipennis (Smoky Crane-fly), in Montana, III. 335.
Tipula maxima, parasitised by *Bucentes cristata*, III. 466.
Tipula oleracea, bionomics and control of, in Austria, II. 429; bionomics of, in France, II. 16, 606; bionomics of, in rice-fields in Italy, III. 53; on cabbage in Norway, III. 107; on cabbage, etc., in Russia, I. 495, III. 401, 544, 610; parasites of, III. 401.
Tipula paludosa, on cereals, etc., in Denmark, III. 245, 697; infested with *Entomophthora arrenoctona*, II. 376.
Tipula simplex, on lucerne in California, II. 245, 553, III. 494.
tipuliformc, *Trochilium*.
tipuliformis, *Aegeria* (*Sesia*).
Tiracola (*Arcilasia*) *plagiata*, parasitised by *Trichogramma minutum* (*pretiosum*) in Sumatra, I. 13.
Tischeria, in Br. Columbia, I. 84.
Tischeria (*Gracilaria*) *complanella*, on oak in Russia and Germany, I. 501, III. 482.
Tischeria malifoliella (Trumpet Apple Leaf-miner), in Canada and U S.A., I. 134, 404, II. 361, III. 180, 708.
Titanochaeta ichneumon, parasite of spiders in Hawaii, III. 247.
titanus, *Strategus*.
Tits, destroying insects, I. 167, 224, 244, 274, 464, 478, II. 222, 229, 306, 529, III. 196.
Tituboea ruficollis, on cotton in Africa, II. 2.
Tmethis muricatus, bionomics of, in Russia and Siberia, I. 542, II. 353, 717, III. 44, 537, 636, 637.
Tmetocera ocellana (see *Eucosma*).
Toads, destroying insects, I. 271, II. 14, 62, 156, 299, 360, III. 297, 300, 369, 371.
Toad-flax (*Linaria vulgaris*), *Thrypoctenus russelli* on, in Britain, II. 488; *Phthorimaea operculella* on, II. 401.
Tobacco (*Nicotiana*), pests of, in E. Africa, II. 197, 570; pests of, in Austria, II. 429; *Epitrix cucumeris* on, in Canada, I. 299; pests of, in Dutch East Indies, I. 14, 56, 111, III. 202, 644, 744; pests of, in Far East, II. 490; not attacked by *Helopeltis* in Gold Coast, II. 671; pests of, in Hawaii, I. 102, II. 629, 630; pests of, in Italy, II. 511; pests of, in Nyasaland, I. 272, II. 277; *Prodenia litura* on, in Philippines, I. 65, 314; pests of, in Rhodesia, I. 287, 288, 289, 307, 423, II. 706, III. 359, 360; pests of, in Russia, I. 357, 490, II. 172, 267, 314, 515, III. 343, 441; importance of, as an insecticide in Russia, III. 20; pests of, in Transvaal, I. 302, III. 749; pests of, in U.S.A., I. 102, 265, 352, 412, 525, II. 280, 435, 524, 564, III. 268, 472, 693, 710; pests of, in West Indies, I. 76, 324, 525, II. 130, III. 477, 525, 585; dried, pests of, I. 170, 525, II. 630, III. 613; mosaic disease of, I. 19; *Phthorimaea operculella* on, II. 401; effect of Paris green on foliage of, III. 645; planted near gooseberry bushes against *Sphaerotheca morsuvae*, III. 340; in insecticides, I. 41, 99, 107, 242, 296, 338, 347, 371, 471, II. 47, 282, 293, 446, 447, 538, 562, 681, 701, 705, III. 25, 97, 101, 218, 257, 271, 394, 473, 525, 599, 604, 605, 609, 689, 735; (see also Black Leaf and Nicotine); extract of, result of mixing with other insecticides, III. 734; preparation of extract of, III. 505, 609; and sulphur, dusting with III. 188.
Tobacco Bud Worm (see *Chloridea virescens*).
Tobacco Flea-Beetle (see *Epitrix parvula*).
Tobacco Hornworm (see *Protoparce*).
Tobacco Sphinx (see *Protoparce*).
Tobacco Splitworm (see *Phthorimaea operculella*.
Tobacco Stem Borer (see *Phthorimaea heliopa*).
Tobacco Thrips (see *Frankliniella fusca*).
Tobacco Wireworm (see *Agriotes segetis*).
Tobacco Worm (see *Protoparce quinquemaculata*).
Tobago, parasol ants in, III. 72; *Tomaspis carmodyi* in, I. 526, II. 62.
toboga, *Vitula*.
Toddy Palm, *Rhynchophorus ferrugineus* on, II. 690.
Togo, *Ceratitis morstatti* in, I. 91; Coccidae of, II. 410; pests of cotton in, I. 349, 350, 351, 545.
Tolype velleda, in orchards in Connecticut, I. 100.
Tomarus bituberculatus (see *Ligyrus ebenus*).
tomaspidis, *Paraphelinus*.

Tomaspis, on sugar-cane in Br. Guiana, II. 58, 522; control of, in Trinidad, III. 679, 680; not controlled by birds in Trinidad, II. 574; quarantine measures against, in West Indies, III. 555.
Tomaspis bogotensis, on grasses in Columbia, II. 286.
Tomaspis carmodyi, on grasses in Tobago, I. 526, II. 62.
Tomaspis flavilatera (Yellow-sided Froghopper), on rice and sugar-cane in Br. Guiana, II. 339, 430, 568.
Tomaspis guppyi, sp. n., not attacking sugar-cane in Trinidad, II. 62.
Tomaspis lepidior, on sugar-cane in Panama, II. 62.
Tomaspis pictipennis, in Grenada and St. Vincent, II. 62.
Tomaspis postica, on sugar-cane in Mexico, I. 184, II. 62.
Tomaspis pubescens (Black Froghopper), on sugar-cane, etc., in Br. Guiana, I. 522, II. 430; on grass in Surinam, II. 62; not attacking sugar-cane in Trinidad, II. 62; parasites of, II. 95.
Tomaspis rubra (Yellow-banded Froghopper), not attacking sugar-cane in Trinidad, II. 62; on *Eupatorium odoratum*, II. 62, 430.
Tomaspis rubra var. *sororia*, II. 62.
Tomaspis saccharina (*varia*) (Trinidad Froghopper), natural enemies of, I. 116, 268, II. 60, 61, 70, 96, 145, 460, 463, 495, 575, 646, III. 207, 555; measures against, I. 320, II. 60, 61, 62, 464, 646; bionomics and control of, on sugar-cane, I. 103, 116, 233, 268, 320, II. 31, 60, 61, 62, 70, 95, 96, 119, 145, 430, 460, 463, 464, 531, 575, 646, III. 14, 122, 207, 555; legislation against, in Br. Guiana, III. 175.
Tomaspis varia (see *T. saccharina*).
Tomato (*Solanum lycopersicum*), pests of, in E. Africa, II. 276, 571; pests of, in Argentina, II. 296; *Thrips tabaci* on, in Australia, III. 491; *Lamproptera* sp. on, in Brazil, III. 388; pests of, in Britain, I. 434, II. 26, III. 285; *Chloridea obsoleta* intercepted on, in California, III. 626; pests of, in Canada, I. 87, 299, 301, II. 24, 491, 676, III. 629; pests of, in Hawaii, II. 630; *Hydroecia micacea* on, in Holland, III. 198; *Agriotes lineatus* on, in Italy, III. 59; *Ceratitis capitata* on, in Java, III. 3, 4; pests of, in Mauritius, II. 612; pests of, in New Zealand, III. 80, 721; pests of, in Philippines, I. 157, 482; pests of, in Porto Rico, III. 476, 477; pests of, in Rhodesia, III. 360; pests of, in Russia, II. 73, 74, 262, 423, 649, 713, 715, III. 172, 221, 601; pests of, in U.S.A., I. 54, 102, 243, 264, 325, 476, II. 115, 116, 159–161, 248, 280, 436, 521, 703, III. 64, 176, 181, 192, 267, 268, 352, 357, 436, 459, 470, 471, 472, 581, 588; bacterial diseases of, III. 540; *Phytophthora* of, III. 522; *Phthorimaea operculella* on, II. 401; planted to protect crops from the attacks of insects, III. 340, 486; decoction of, against insects, III. 440; not attacked by *Phlyctaenodes sticticalis* in Russia, I. 534.
Tomato Aphis (see *Macrosiphum lycopersici*).
Tomato Caterpillar (see *Prodenia litura*).
Tomato Sphinx (see *Protoparce*).
Tomato Worm (see *Chloridea obsoleta*).
tomentosus, Byturus; *Chlaenius*.
Tomicus bidens (see *Pityogenes bidentatus*).
Tomicus bistridentatus (see *Pityogenes*).
Tomicus chalcographus (see *Pityogenes*).
Tomicus dispar (see *Xyleborus*).
Tomicus longifolia (see *Ips*).
Tomocera, parasite of *Saissetia oleae* in U.S.A., II. 554.
Tomocera californica, imported into Hawaii, III. 757; a hyperparasite of *Coccus hesperidum*, I. 309.
Tomocera ceroplastis, imported into Hawaii, III. 757.
Tonga, *Graeffea cocophaga* on coconuts in, II. 691.
Toona, Red, *Tetrastia meticulosalis* on, in Ceylon, II. 644.
toowoombae, Rhizobius.
Toronto, insect pests in, I. 400, 404, II. 491, III. 72.
Torpedo Bug (see *Siphanta acuta*).
torquens, Contarinia.
torrensis, Cladognathus.
Tortola, *Lachnopus curripes* on cotton in, III. 22.
tortricidis, Omorgus.
tortricis, Nasonia.
Tortrix, on *Acacia decurrens* in Ceylon, III. 84; on apple in Ireland, II. 8; on coca in Java, III. 312.
Tortrix bergmanniana, on roses in Russia, II. 720; *T. forskaleana* confused with, II. 168.

Tortrix callopista, sp. n., feeding on Coccids in Nigeria, II. **203**; on cacao in Nigeria, III. **165**.
Tortrix capucina, parasitised by *Limnerium blackburni* in Hawaii, III. **682**.
Tortrix cerasana (see *T. ribeana* var. *cerasana*).
Tortrix chondrillana, on cotton in Turkestan, II. **313, 714**; parasite of, in Turkestan, III. **35**.
Tortrix citrana (Orange Tortrix), in California, II. **248, 439**, III. **622**.
Tortrix corylana, in Crimea, III. **613**.
Tortrix costana (see *Cacoecia*).
Tortrix crataegana, in Russia, III. **220, 613**.
Tortrix forskaleana, bionomics of, in Sweden, II. **168**.
Tortrix fumiferana (Spruce Bud Moth), bionomics of, in Canada and U.S.A., I. **100, 141, 201, 406**, II. **184, 710**, III. **43, 585**.
Tortrix heparana, in orchards in Russia, II. **342**, III. **639**.
Tortrix laevigana (see *T. rosana*).
Tortrix loeflingiana, measures against, on vines in Russia, III. **209**.
Tortrix murinana, destroyed by birds in Germany, II. **148**; on spruce in Holland, I. **386**.
Tortrix (*Cacoecia*) *piceana*, on pine in Sweden, III. **291**,
Tortrix (*Cacoecia*) *podana*, in Astrachan, III. **220**; on oaks in Britain, II. **619, 620**; on vegetable-marrow in France, I. **504**.
Tortrix (*Cacoecia*) *postvittana*, on fruit trees in Australia, III. **492**; parasites of, in Hawaii, III. **681, 757**; preyed on by *Syrphus ropalus* in New Zealand, III. **722**.
Tortrix pronubana, on carnations in S. France, II. **620**.
Tortrix (*Asthenia*) *pygmaeana*, I. **372**.
Tortrix (*Pandemis*) *ribeana*, on apple, etc., in Britain, II. **8, 619**; on walnuts, etc., in Russia, III. **225, 639**; on spruce in Sweden, III. **290**.
Tortrix ribeana var. *cerasana*, on fruit trees in France, III. **496**; on cherries, etc., in Russia, I. **489**, II. **342**, III. **604**.
Tortrix rosana, in Crimea, III. **613**; on pear trees in France, II. **623**.
Tortrix sorbiana, in Astrachan, III. **220**.
Tortrix viridana (Oak Tortrix), on forest trees in Britain, I. **463**, II. **378, 619**; on oak in Portugal, I. **313**; on oaks, etc., in Russia, III. **437, 606**; parasitised by *Macrocentrus abdominalis* in Russia, III. **92**; destroyed by birds, II. **148, 378**.
Tortrix xylosteana (see *Cacoecia*).
torvis, Syrphus.
Torymus, phytophagous habits of, III. **727**.
Toumeyella liriodendri (Tulip Tree Scale), in U.S.A., I. **101**, III. **372, 474**.
Tournefortia argentea, *Eucalymnatus tessellatus* on, in Seychelles, I. **129**.
townsendi, Catolaccus; *Cerambycobius*.
Toxoptera, in Ceylon, II. **652**.
Toxoptera aurantii, on cacao and coffee in Java, III. **663**.
Toxoptera graminis (Wheat Aphis), in E. Africa, I. **39**, II. **570**; bionomics of, in S. Africa, II. **153-155**; on wheat in Egypt, III. **749**; on grain in Russia, I. **359, 460**, II. **171**, III. **45, 601**; bionomics of, in U.S.A., II. **536**, III. **90, 406, 516, 673**.
Toxoptera theobromae, on cacao in Uganda, II. **592**, III. **752**.
Toxotrypana curvicauda (Papaya Fruit-fly), on papaws in Florida, III. **81**; in Porto Rico, I. **390**; intercepted in U.S.A., III. **455**.
Trabala vishnui, on tea in Far East, II. **490**.
trabeatus, Lygus.
Trachea atriplicis, trapped with molasses in Russia, III. **639**.
Trachea (*Hadena*) *basilinea*, in Austria, II. **453, 482**; distribution of, in Europe, II. **453**; on grain in Germany, II. **500**; bionomics of, on grain in Russia, I. **495**, II. **41, 171, 198, 258, 442, 503**, III. **111, 203, 205, 309, 403, 481, 600, 635**.
Trachea (*Hadena*) *secalis* (*Apamea didyma*), on forage grass, etc. in Denmark, III. **245, 247, 698**; on rye in Russia, III. **111**; on cereals in England, I. **434**.
Trachea (*Hadena*) *turbulenta*, on *Smilax rotundifolia* in Connecticut, III. **372**.
Trachelospermum jasminoides, foodplant of *Aulacaspis pentagona*, I. **222**.
Trachelus tabidus, on grain crops in Russia, II. **172**, III. **47, 480**.
Trachyderes succinctus, on citrus in Brazil, II. **173**.

Trachynotus griseus, on tobacco in Rhodesia, I. 308.
trachynotus, Meteorus.
Tradescantia, II. 101.
Tragocephala pretiosa, I. 247; on camphor in E. Africa, I. 11, 414.
Tragocephala variegata, on pigeon-pea in Zanzibar, III. 125.
tragopogonis, Amphipyra.
Trametes pini, infesting Douglas firs in U.S.A., III. 670.
Transcaspia, insect pests in, I. 369, 446, 448, 449, 450, 535; pests of cotton in, II. 311, 715, III. 338; (see Russia).
Transcaucasia, formation of new Entomological Bureau in, III. 599; *Eriosoma lanigerum* in, II. 76; locusts in, III. 242; *Phylloxera* on vines in, II. 168; *Sitotroga cerealella* damaging grain in, II. 40; (see Russia).
translucens, Tarsonemus.
transparens, Aspidiotus (see *A. destructor*); *Ctenochiton.*
Transvaal, Aphids in, III. 748, 749; wild cotton seeds imported from, infested with *Bruchus*, II. 461; Coccids in, II. 353; legislation regarding removal of plants from, II. 86; miscellaneous insect pests in, I. 12, 146, 197, 303, 473, II 47, 276, 280, 653, III. 167, 359; olive pests in, III. 432; tobacco pests in, I. 302.
transvaalensis, Aspidiotus.
transversa, Argiope.
transversalis, Polyrrhabdotus.
transversoguttata, Coccinella.
trapezalis, Marasmia.
trapezina, Calymnia (*Cosmia*).
Traveller's Joy (see *Clematis vitalba*).
tredecimguttatus, Lathrodectus.
tredecimpunctata, Hippodamia.
Tree-cotton (*Gossypium peruvianum*), *Hemichionaspis minor* on, in Peru, I. 157.
Tree Cricket (see *Oecanthus*).
Tree Cricket, Narrow-winged (see *Oecanthus angustipennis*).
Tree Cricket, Snowy (see *Oecanthus niveus*).
Tree Cricket, Striped (see *Oecanthus fasciatus*).
Trefoil (see Clover).
Trematopygus caliroae, in U.S.A., III. 691.
Trematopygus eriocampoididis, sp. n., parasite of *Eriocampoides limacina* in U.S.A., III. 691.
Tremex, in N. America, I. 255.
Tremex columba, on *Carya alba* in U.S.A., II. 697.
tremulae, Melasoma (*Lina*).
trepida, Notodonta.
Trewia nudiflora, Acrocercops on, in Ceylon, II. 597.
triangularis, Disonycha.
Triaspis vestiticida, on cotton in Peru, I. 316.
Tribolium castaneum, on cotton in Africa, II. 2; in stored grain in India, II. 204, III. 145; in stored maize in U.S.A., II. 382; damaging biscuits, I. 292.
Tribolium confusum (Confused Grain Beetle), in cotton seed in Africa, II. 2; in stored grain in Africa, I. 414, II. 117, III. 166; control of, in stored cereals in Canada and U.S.A., I. 114, 152, II. 93, 382, III. 175, 376, 381; in stored tobacco in Rhodesia, I. 289; in grain in Russia, II. 40, III. 221; in Scotland, I. 387; in St. Vincent, III. 411; in stored groundnuts in Senegal, II. 549; destroying biscuits, I. 292.
Tribolium ferrugineum (see *T. castaneum*).
Tribolium navale, in maize in Ivory Coast, II. 490.
tricarinatus, Chorinaeus.
Trichiocampus (*Cladius*) *viminalis* (Poplar Sawfly), on poplars in Holland, I. 386; on balsam poplars in Norway, III. 697; bionomics of, on poplars, etc., in Russia, II. 45, III. 401, 641; on poplars in U.S.A., II. 185.
Trichiosoma vitellinae (*Lophyrus rufus*), bionomics of, on pine in Russia, III. 389.
Trichiura crataegi, on plum in Bessarabia, III. 225.
Trichius orientalis, in Russia, II. 110.
Trichobaris trinotata, on *Datura meteloides* in California, III. 690.
Trichochrous (*Pristoscelis*) *texanus*, not recommended to be introduced into Queensland against prickly pear, III. 126; on cactus in U.S.A., I. 82.
Trichodes alvearius, in nests of leaf-cutting bees, III. 40.
Trichodes amnios, parasitising locusts, III. 428.
Trichodes amnios var. *flavicornis*, parasitising locusts, III. 40.
Trichodes apiarius, destroying *Mylabris* in Russia, II. 474; parasitising bees, III. 40.
Trichodes octopunctatus, in nests of *Chalicodoma rufescens*, III. 40.
Trichodes umbellatarum, parasitising locusts, III. 428.
Trichogomphus semmelinki, on coconut in South Sea Islands, II. 2, 689.

Trichogramma (*Pentarthron*), parasite of *Diatraea* spp. in Br. Guiana I. **521**; parasite of Lepidoptera in Dutch East Indies, III. **202, 645**; hosts of, in Russia, III. **641**; parasite of *Cydia pomonella*, III. **241**; parasite of *Hyphantria cunea*, I. **402**; parasite of *Euproctis chrysorrhoea*, I. **270**, II. **394**; parasite of *Oria musculosa*, III. **111**; parasite of *Polychrosis botrana*, II. **345**.

Trichogramma australicum, parasite of sugar-cane borers in Java, III. **26, 383**; parasite of Lepidoptera in Java and Queensland, III. **26**.

Trichogramma australicum minutum, not attacking *Acrocercops cramerella*, III. **312**.

Trichogramma (*Pentarthron*) *carpocapsae*, bionomics of, in Russia, I. **363, 431** (note), **436, 489**, II. **222, 263, 356**, III. **35, 241**.

Trichogramma embryophagus (see *T. fasciatum*).

Trichogramma fasciatum, parasite of *Cydia pomonella* in Russia, I. **366, 436**, II. **263, 335**, III. **241, 613**.

Trichogramma flavum, parasite of Lepidoptera in Hawaii, III. **681**; perhaps identical with *T. pretiosum*, II. **629**.

Trichogramma minutum (*pretiosum*), methods of handling, I. **515**; attempt to establish, in S. Africa, I. **363**; parasite of Lepidoptera in Canada and U.S.A., I. **113, 525**, III. **68, 153, 301, 471, 513, 532, 565, 584, 625**; parasite of Lepidoptera in Dutch East Indies, I. **13, 56**, III. **202, 383**; parasite of cutworms in Hawaii, II. **629**; parasite of *Diatraea* in West Indies, I. **184, 319, 435**, II. **32, 48, 279, 568**, III. **26, 674, 761**; distribution of, III. **26**.

Trichogramma (*Chaetosticha*) *nanum*, parasite of *Diatraea venosata* (*striatalis*) in Java, III. **383**.

Trichogramma pretiosum (see *T. minutum*).

Trichogramma (*Oophthora*) *semblidis*, bionomics and hosts of, in Russia, I. **317, 363, 431, 436, 489, 540, 541**, II. **74, 198, 200, 263, 523**, III. **112, 211, 241, 613**; distinct from *T. carpocapsae*, II. **222**; parasite of vine pests, I. **71, 524**, II. **345, 588, 607**, III. **211, 497**.

Trichogramma semifumatum, parasite of *Protoparce cingulata* in Hawaii, III. **682**.

Trichogrammatoidea lutea, parasite of *Enarmonia batrachopa* in S. Africa, II. **655**.

Trichogrammatoidea nana, parasite of *Diatraea striatalis* in Java, III. **26**; not attacking *Acrocercops cramerella* experimentally, III. **312**.

Trichomalus cristatus (see *Pteromalus*).

Trichoniscus roseus, in greenhouses in Britain, II. **597**.

Trichophaga swinhoei, parasites of, in Egypt, II. **504**.

Trichophaga tapetzella, infesting carpets, etc., III. **509**.

Trichopoda, hosts of, III. **248**.

Trichopoda pennipes, parasite of *Anasa tristis* in Texas, I. **161**.

Trichoporus, I. **549**.

Trichopria capensis, imported from S. Africa into Hawaii against *Ceratitis capitata*, II. **317**.

Trichostibas parvula (see *Urodus*).

Trichothrips marginalis, sp. n., on willow in Florida and Louisiana, III. **631**.

Trichothrips terminalis, sp. n., in Florida and Louisiana, III. **631**.

tricincta, *Typhlocyba*.

tricolor, *Mylabris*.

tricuspidata, *Diaspis*; *Misumena*.

Tridacus (see *Dacus*).

tridens, *Acronycta*.

tridentata, *Cyclocephala*; *Polyphylla*; *Saperda*.

tridentatae, *Aphis*; *Chaitophorus*.

trifasciata, *Coccinella*.

trifolii, *Apion*; *Callipterus*; *Eriophyes plicator*; *Hylastes*; *Lasiocampa*; *Perrisia* (*Dasyneura*); *Scotogramma* (*Mamestra*).

Trifolium (see Clover)

Trifolium alexandrinum (Berseem), Aphids on, in Egypt, III. **748, 749**.

Trifolium hybridum (Alsike Clover), *Perrisia* (*Dasyneura*) *leguminicola* on, in Britain, I. **242**; not damaged by *Apion* in Russia, I. **483**; *Colias eurytheme* on, in U.S.A., III. **153**; *Bryobia pretiosa* (*pratensis*) on, in Quebec, II. **664**.

Trifolium incarnatum, not damaged by *Apion* in Russia, I. **483**.

Trifolium montanum, not damaged by *Apion* in Russia, I. **483**.

Trifolium pratense (Red Clover), pests of, in Britain, I. **242**; pests of, in Russia, III. **205, 210**; *Apion* on, in Russia, III. **641**; pests of, in U.S.A., III. **114, 153, 375**; *Callipterus ononidis* on, III. **749**.

Trifolium reflexum, *Colias eurytheme* on, in U.S.A., III. **153**.

Trifolium repens (White Clover), *Perrisia trifolii* on, in Britain, I. **242**; not damaged by *Apion*, in

Russia, I. 483; *Apion* on, in Russia, III. 205; *Aphis ononidis* on, in U.S.A., III. 114.
Trifolium resupinatum, not damaged by *Apion* in Russia, I. 483.
Trifolium stoloniferum (Buffalo Clover), *Colias eurytheme* on, in U.S.A., III. 153.
trifurca, Ceroctis.
trifurcata, Cerotoma; *Hyperaspis.*
Trigona clypeata, on *Hevea* in Uganda, III. 752.
Trigonaspis megaptera, galls of, destroyed by birds, I. 169.
Trigonogastra megacephala, sp. n., on jak fruit in Ceylon, III. 443.
Trigonogastra rugosa, sp. n., parasite of *Agromyza phaseoli* in Ceylon, III. 443.
Trigonogenius fallax, on *Khaya senegalensis* in E. Africa, I. 351.
Trigonotylus ruficornis, on cereals in Russia, III. 45, 205, 479, 481.
trijuga, Schleichera.
trilineata, Hyperaspis.
triloba, Fagisuga.
trilobitiformis, Aspidiotus; *Pseudaonidia.*
trima, Orthocraspeda.
trimaculata, Phaonia (*Hyctodesia*); *Sibine.*
Trimeromicrus maculatus, sp. n., on lucerne infested with *Bruchophagus funebris* in Arizona, III. 151.
Trimerotropis vinculata (see *Pseudotrimerotropis*).
Trinacriella magnifica, sp. n., on oats in Sicily, III. 54.
Trincomalee Wood (see *Berrya ammonilla*).
Trinidad, cacao pests in, I. 99, 198, 270, 425, II. 69, 145, 324, 459, III. 14, 137, 276, 368, 468; coconut pests in, I. 285, III. 14, 276, 368; miscellaneous pests in, II. 92, 691, III. 72, 80, 367, 618, 652, 679; new parasites from, II. 288; bionomics and control of sugarcane pests in, I. 103, 233, 259, 268, 320, II. 31, 60, 61, 70, 95, 96, 145, 460, 463, 495, 519, 646, III. 122, 207, 555, 679; value of birds in, II. 574.
trinitatis, Azya.
Trinophyllum cribratum, Tetropium oreinum erroneously recorded as, in India, III. 706.
trinotata, Trichobaris.
Trionymus violascens, sp. n., on *Agropyron* in Colorado, I. 148.
Trioxys auctus, parasite of *Aphis rumicis* (*euonymi*), II. 620, 696.
Trioxys heraclei, parasite of *Aphis rumicis* (*euonymi*), II. 620.
Trioza, on citrus in E. Africa and Uganda, I. 49, II. 571; in S. Africa, III. 507.
Trioza alacris (Laurel Psylla), on laurel in Austria, II. 482; on bay in California, III. 348.
Trioza diospyri (see *Psylla*).
Trioza flavipennis, on lettuce in France, I. 504.
Trioza litseae, on laurel, etc., in Réunion, II. 216.
Trioza nigricornis, on turnips in France, I. 504.
Trioza salicis, on *Pinus virginiana* in Washington, III. 567.
Trioza tripunctata, on blackberries, etc., in U.S.A., III. 515, 567.
Triphleps, predaceous on other insects in U.S.A., II. 46, III. 259.
Triphleps albidipennis, predaceous on Aphids and red spider in Russia, II. 312, 313.
Triphleps insidiosus, predaceous on other insects in U.S.A., I. 242, 353, II. 227, 704, III. 463, 471, 576, 578.
Triphleps tristicolor, predaceous on *Tetranychus telarius* in U.S.A., I. 240.
Triplasis purpurea, Blissus leucopterа on, in Kansas, II. 227.
Tripsacum dactyloides, Prosopothrips cognatus on, in U.S.A., III. 578.
tripunctata, Eucosma (*Grapholitha*); *Oberea*; *Trioza.*
tripustulatus, Liocoris.
Trirhabda, possibly original host of *Tetrastichus asparagi*, I. 15.
Trirhabda brevicollis, on grapefruit, etc., in Florida, III. 326.
trirhodus, Hyalopterus.
Trissolcus simoni, parasite of *Eurygaster integriceps*, etc., in Russia, I. 450, III. 45.
tristicolor, Triphleps.
tristis, Anasa; *Morimus* (see *M. funereus*); *Lachnosterna*; *Otiorrhynchus.*
tristriatus, Eriophyes.
tristrigosa, Earias (see *E. insulana*).
tritea, Ceratitis.
tritici, Contarinia (*Cecidomyia, Diplosis*); *Euxoa* (*Agrotis*); *Frankliniella* (*Euthrips, Haplothrips*); *Isosoma.*
triticiperda, Aelia.
Triticum amyleum (see Wheat).
Triticum caesium, not attacked by *Phlyctaenodes sticticalis*, I. 360.
Triticum cristatum, Oscinella frit on, II. 371.
Triticum repens, pests of, in Russia, I. 214, II. 259; not attacked by *Phlyctaenodes sticticalis*, I. 360.

triticum, Pentatoma (see *Aelia cognata*).
Tritochaeta polleniella (see *Zenillia pullata*).
Tritoxa flexa (Black Onion Fly), on onions in Wisconsin, III. 570.
Triumfetta macrophylla, food-plant of *Anaphe* in Africa, I. 33, II. 548.
Triumfetta neglecta, Tetranychus bioculatus on, in India, I. 508.
triundulatus, Corymbites.
trivialis, Pentaphis; *Ravinia.*
trivittata, Diabrotica.
trivittatus, Leptocoris.
Trochalus carinatus, on cacao in Nigeria, III. 165, 663.
Trochilium apiforme, measures against, in Russia, III. 341.
Trochilium tipuliforme, on black currants in France, I. 228.
Trochorrhopalus strangulatus, on sugar-cane in Mauritius, I. 31.
Trochosa singoriensis, preying on locusts in Siberia, III. 537.
Troctes divinatoria (Book Louse), *Chelifer cancroides* predaceous on, I. 530; on wheat in Montana, II. 536; in zoological collections in Russia, III. 633.
Troglodytes aedon, destroying insects, I. 305, II. 307.
Troglodytes rufulus, destroying insects, in Trinidad, II. 575.
troglodytes, Astatus; *Spilomena.*
Trogoderma, damaging biscuits, I. 292.
Trogoderma ornatum, effect of heat on, II. 703.
Trogoderma tarsale, a museum pest, I. 37.
Trogosita, damaging biscuits, I. 89.
Trogosita mauretanica (see *Tenebroides*).
Trombidium, predaceous on *Chortophila brassicae*, III. 1. 369; infesting locusts in Russia, III. 503, 537.
Trombidium holosericeum, attacking *Phylloxera*, III. 405.
Trombidium locustarum, attacking grasshoppers in U.S.A., III. 263, 566.
Trombidium parasiticum, attacking *Dociostaurus maroccanus* in Russia, III. 244.
Trombidium pusillum (Harvest Mite), bionomics and distribution of, II. 502.
Tropicoris rufipes, destroying *Lymantria monacha* in Holland, I. 385.
Tropidacris, on *Manihot glaziovii* in Brazil, II. 194.
Tropidacris cristata, on *Hevea brasiliensis* in Br. Guiana, II. 569.
Tropidochila pilosa (see *Tingis*).
Tropinota (see *Epicometis*).
Trumpet Leaf-miner of Apple (see *Tischeria malifoliella*).
truncata, Phragmatiphila.
truncataria, Epelis.
truncatella, Aphelosetia.
truncatellus, Litomastix (*Copidosoma*).
truncatus, Emphytus; *Telenomus.*
Trybliographa, parasite of *Chortophila brassicae*, III. 1, 369.
Trybliographa anthomyiae, parasite of *Chortophila brassicae* in Canada, II. 665.
Trycolyga sorbillans (*bombycis*), parasite of silkworms in India, II. 670.
tryoni, Dacus (see *D. ferrugineus*); *Diachasma.*
Trypeta arctii (see *T. tussilaginis*).
Trypeta cognata (see *Acidia*).
Trypeta cornuta, on Jerusalem artichoke, III. 33.
Trypeta cylindrica, on Jerusalem artichoke, III. 33.
Trypeta heraclei (see *Acidia*).
Trypeta leontodontis (see *Tephritis*).
Trypeta ludens (see *Anastrepha*).
Trypeta musae (see *Rioxa*).
Trypeta onotrophes (see *T. cylindrica*).
Trypeta tussilaginis, on Jerusalem artichoke, III. 33.
Trypeta zoë (see *Spilographa*).
Tryphaena (*Agrotis*) *fimbria*, on vines in Italy, III. 113.
Tryphaena pronuba (see *Agrotis*).
Tryphon ambiguus, parasite of *Pteronus ribesii* in France, II. 622.
Tryphon lucidulus, parasite of *Priophorus padi* in France, II. 285.
Trypodendron lineatum, on spruce and pine in Canada, I. 407, III. 43.
Trypodendron retusum, on poplar in Canada, I. 407, III. 43.
Trypopremnon latithorax, sp. n., on potatoes imported into U.S.A. from Peru, II. 242.
Tsuga canadensis, Chermes funitectus on, in Germany, III. 597.
Tsuga mertensiana hookeriana, Megastigmus tsugae in seeds of, I. 297.
tsugae, Aspidiotus; *Megastigmus*; *Mycodiplosis.*
tuberculata, Aphis.
tuberculatum, Bryodema; *Ectatomma.*
tuberculifera, Microplitis.
tuberculostemmata, Protolachnus.
tuberculosus, Hypothenemus.
tuberosum, Chaerophyllum.
tucumanus, Rhigopsidius.

tulipae, Aphis.
Tulip, pests of, II. 363, 557, III. 192, 200, 210, 671.
Tulip Tree (*Liriodendron*), pests of, in U.S.A., I. 3, III. 372; not attacked by *Lymantria dispar* in U.S.A., III. 669.
Tulip Tree Scale (see *Toumeyella liriodendri*).
Tullgrenia phaseoli, II. 406.
tumidicollis, Corymbites.
tumidulus, Campoplex.
tumidus, Tetranychus.
tumulosus, Ligyrus.
tuna, Opuntia.
Tunisia, insect pests in, I. 167, II. 229, 231, 284, 451, 556.
Tur (see *Cajanus indicus*).
Tur Hairstreak (see *Catochrysops cnejus*).
turanica, Epicometis (*Tropinota*).
turanicum, Acyrthosiphon pisi.
turbulenta, Trachea (*Hadena*).
turca, Otiorrhynchus.
turcmenica, Phyllotreta.
turcomana, Arcyptera (*Pallasiella, Stethophyma*).
turionellae, Pimpla.
Turkestan, pests of cotton in, II. 75, 311; parasites of *Cydia pomonella* in, III. 241; proposed legislation against *Eriosoma lanigerum* in, III. 539; control of locusts in, II. 37, 38, 39, 72, 430, 508, 614, III. 91; bionomics of *Melolontha* spp. in, III. 603; miscellaneous pests in, II. 488, 649, 713–716, III. 92, 185, 240, 633; economic value of *Motacilla* spp. in, II. 39; pests of orchards in, I. 346, 367–370, 431, 439, II. 73, 74, 75–77, 318, 419, 422, 468, 635–637, 638, 639, 701, 713–716, III. 13, 34, 591, 727; sugar-beet pests in, I. 359, II. 248, 466.
turkestanicus, Camponotus maculatus; *Hodotermes.*
Turkey, *Blitopertha lineolata* on beets in, II. 466; *Bruchophagus funebris* in, III. 185; *Hypera denominanda* in, II. 262.
Turkeys, destroying insects, I. 453, II. 122, 163, 542, 559, III. 12, 268, 556.
turneri, Palaconeura; *Selenacus.*
Turnip (*Brassica rapa*), *Hellula undalis* on, in Australia, III. 6; pests of, in Austria, II. 429; pests of, in Britain, I. 387, II. 8, III. 96, 256, 500, 550, 715, 746; pests of, in Canada, I. 400, 412, II. 24, 664, 665, III. 68, 507, 565; pests of, in Denmark, III. 246, 526, 698; pests of, in France, I. 227, 335, 504, II. 557, III. 1; pests of, in Germany, II. 494, 501; pests of, in Hawaii, III. 363, 657; *Porina* spp. on, in New Zealand, III. 707; pests of, in Nyasaland, II. 278; *Pieris monuste* on, in Porto Rico, III. 477; pests of, in Rhodesia, II. 235; pests of, in Russia, I. 536, 537, II. 52, 266, 340, 357, 370, 372, 373, 648, III. 51, 208, 221, 536; *Phaedon cochleariae* on, in Sweden, III. 346; pests of, in U.S.A., I. 243, II. 160, 161, III. 18, 85, 178, 266, 471; *Crocidolomia binotalis* on, in Zanzibar, III. 125.
Turnip Flea-Beetle (see *Phyllotreta nemorum* and *P. vittata*).
Turnip Mud-Beetle (see *Helophorus rugosus*).
Turnip Sawfly (see *Athalia colibri*).
Turpentine, as an insecticide, III. 284; insecticides containing, I. 274, 433, II. 123, 246, 293, 604, 683, III. 257; relative attractiveness of, to *Ceratitis capitata*, III. 28.
turrita, Acrida.
tussilaginis, Trypeta.
Tussock Moth (see *Hemerocampa*).
Twelve-spotted Asparagus Beetle (see *Crioceris duodecimpunctata*).
Twelve-spotted Cucumber Beetle (see *Diabrotica soror*).
Twice-stabbed Lady-beetle (see *Chilocorus bivulnerus*).
Twig Borer of Lime (see *Elaphidion mite*).
Twig Girdler (see *Oncideres cingulatus*).
Twig Girdler of Cacao (see *Eudesmus grisescens*).
Twig Girdler of Camphor, in Ceylon, II. 597.
Twig Moth, Peach (see *Anarsia lineatella*).
Two-lined Chestnut Borer (see *Agrilus bilineatus*).
Two-striped Grasshopper (see *Melanoplus bivittatus*).
Tychea phaseoli, distribution and food-plants of, III. 749.
Tychea setariae, on lettuce, I. 504.
Tychius gossypii, sp. n., on cotton in Egypt, III. 167.
Tylenchomorphus, parasite of *Hylobius abietis* in Germany, II. 375.
Tylenchus, on lucerne in S. Africa, II. 299; attacks of, compared with those of *Tarsonemus spirifex*, III. 664.
Tylenchus acutocaudatus, on coffee in Java, I. 123, 501.
Tylenchus biformis (see *T. similis*).
Tylenchus contortus typographi, parasite of *Ips typographicus* in Germany, II. 375.

Tylenchus devastator, in Sicily, III. 714.
Tylenchus devastatrix (Bulb Eelworm), II. 625; on cereals, I. 226, II. 176, 564, III. 202, 247, 428, 740; on hyacinths and onions, II. 594, 656, III. 544, 740; on lucerne, etc., I. 242, 527, III. 524, 699; carbon bisulphide against, II. 602.
Tylenchus dipsaci, food-plants of, II. 625.
Tylenchus dispar typographi, parasite of *Ips typographicus* in Germany, II. 375.
Tylenchus hyacinthi, on hyacinths in France, II. 594.
Tylenchus macrogaster, associated with bark-beetles, II. 375.
Tylenchus major, associated with bark-beetles, II. 375.
Tylenchus similis, on sugar-cane and bananas in Fiji, III. 726.
Tyloderma fragariae, declared a pest in Br. Columbia, I. 48; on strawberries in Missouri, I. 475.
Tylopsis thymifolia (*lilifolia*), on vines in Italy, III. 113.
Tympanuchus americanus (Prairie Chicken), destroying insects in U.S.A., I. 431, II. 227, III. 249, 297.
Typha angustifolia (Small Bullrush), *Phthorimaea operculella* on, II. 410.
Typha latifolia, Aphids on, in U.S.A., II. 696, III. 631; food-plant of *Lissorhoptrus simplex* in U.S.A., I. 151.
Typhlocyba, parasites of, III. 252, 467.
Typhlocyba aurata, on oats in France, III. 428.
Typhlocyba comes (Grape Leaf-hopper), bionomics of, in N. America, I. 180, 269, 276, 400, 404, 405, II. 246, 281, 282, III. 68, 121, 181, 327, 493, 511, 530, 552, 557.
Typhlocyba douglasi, parasitised by *Atelenura spuria*, III. 252.
Typhlocyba hippocastani, parasitised by Pipunculids, III. 252.
Typhlocyba obliqua, on apples in Kansas, III. 545.
Typhlocyba rosae (Rose leaf-hopper), on roses in Canada, III. 551; on roses in Holland, II. 642; on roses in Russia, II. 720, III. 45, 393, 610; disseminating fire-blight in U.S.A., II. 288; parasitised by Pipunculids, III. 252.
Typhlocyba tricincta, on vines in Canada, II. 281.
Typhlocyba vulnerata, on vines in Canada, II. 281.
typhoides, Leptosonyx.
typica, Naenia.
typicus, Cadamustus.
typographus, Ips (*Tomicus*).
Tyrannus rostratus, destroying *Erynnyis ello*, II. 533.
Tyrannus tyrannus (Kingbird), destroying insects, I. 226, 275, 431, II. 525.
tyrannus, Olethrius.
Tyroglyphus armipes, attacking *Calosoma sycophanta* in U.S.A., III. 717.
Tyroglyphus (*Aleurobius*) *farinae* (Flour Mite), in flour in Britain, II. 564; in stored grain and mustard in Russia, II. 41, 503, III. 212, 219; in U.S.A., III. 262, 566; in cheese, II. 503.
Tyroglyphus lintneri (Mushroom Mite), on mushrooms in New Jersey, III. 566; in Oregon, III. 262.
Tyroglyphus longior, in dried fruit in California, III. 575; damaging cheese and flour in Russia, II. 41, 503.
Tyroglyphus mycetophagus, III. 542.
Tyroglyphus siro (Cheese Mite), II. 41, 503, 656; in dried fruit in California, III. 575; control of, in cheese, III. 733.

U.

Udamostigma tessmanni, measures against, on cacao in Nigeria, III. 165, 663.
Ufens niger, parasite of cane leaf-hopper in Porto Rico, III. 26; parasite of *Draeculacephala mollipes* in U.S.A., III. 577.
Uganda, cacao pests in, II. 59, 591, III. 288, 663, 752; new Chalcids from, III. 168; Coccidae from, I. 258, II. 105, 276; coffee pests in, I. 48, 247, 351, II. 58, 241, 273, 275, 447, 591, III. 289, 751; cotton pests in, II. 59, 591, III. 752; fruit-flies from, III. 748; rubber pests in, II. 591, III. 752; silkworms in, I. 33, II. 547; tea pests in, II. 59; legislation against importation of coffee into, I. 349, II. 273; (see also Africa, East).
ugandae, Ceroplastes.
uhleri, Chlorochroa; *Horistonotus.*
Ulex europaea (Furze), *Lampides baetica* on, in France, I. 411; *Apion ulicis* imported on, into U.S.A. from England, III. 117, 354.

ulicis, Apion.
ulmariae, Aphis ; *Siphonophora* (see *Acyrthosiphon pisi*).
ulmi, Anthonomus (see *A. pediculariusi*); *Eriosoma* (*Schizoneura*) ; *Gossyparia* (*Coccus*) (see *G. spuria*); *Kaliosysphinga*; *Lepidosaphes* ; *Tetraneura.*
ulmicola, Colopha ; *Oberea.*
ulmisacculi, Tetraneura.
Ulmus, Aspidiotus perniciosus on, I. 472; (see Elm).
Ulmus americana, Aphids on, in U.S.A., I. 25, II. 152, III. 351.
Ulmus campestris (Common Elm), pests of, I. 222, II. 152, 510, 644, 705, III. 474.
Ulmus effusa, Eriosoma on, II. 82, 152.
Ulmus montana (Witch Hazel), *Eriosoma ulmi* on, in Russia, II. 82; pests of, in U.S.A., I. 381, II. 711, III. 668.
Ulmus pedunculata, Sciaphobus squalidus on, in Russia, II. 337.
umbellatarum, Trichodes.
umbra, Pyrrhia.
umbraculata, Porina.
Umbrella Pine (see *Sciadopitys*).
Umbrella Tree, *Aleurodes citri* on, in Florida, III. 23.
umbripennis, Telenomus.
umbrosus, Adoretus.
uncinata, Aulacaspis.
undalis, Hellula.
undata, Mocis (*Chalciope*) ; *Pyrgota,*
undatus, Brachycerus ; *Coraebus.*
undecimpunctata, Coccinella (*Adalia*).
undulata, Aethriostoma ; *Phyllotreta.*
unguicularis, Pomphopoea.
unguiculatus, Aspidiotus ; *Eriophyes.*
unicolor, Agrotis ; *Macrobasis* ; *Pachytalia* (*Psyche*).
unicornis, Schizura.
unicostata, Monosteira.
unicus, Entedononecremnus.
unifasciata, Goniomima (*Belvosia*).
unifasciatum, Callidium.
unifasciatus, Tillus.
uniforma, Nisotra.
uniformis, Macrodactylus ; *Sesamia.*
unilineatus, Julus.
unionalis, Margarodes.
unipuncta, Cirphis (*Agrotis, Heliophila, Leucania*).
unispinosus, Scolytus.
United States of America, asparagus pests in, I. 15, 296; measures against avocado pests in, II. 13; cactus pests in, I. 78–82, III. 126; cranberry pests in, II. 455–457, III. 672; cotton pests in, I. 186, II. 253, 582, III. 133, 273, 685; forest pests of, I. 233, 234, II. 132, 308, 645, III. 86, 147, 248, 474, 475, 559, 573, 587, 667, 669–671, 672, 673; pests of grain crops in, II. 225, 573, 696, III. 184, 298, 416, 470, 573, 587, 673, 761; juniper-berry pests in, III. 580; lucerne pests in, III. 139, 153, 185, 296, 333; miscellaneous pests in, I. 53, 55, 101, 296, 322, 342, II. 32, 45, 92, 193, 241, 307, 308, 361, 378, 572, 599, 600, 625, 644, 701, 703, III. 77, 113, 130, 132, 153, 184, 249, 269, 330, 350, 370, 380, 415, 422, 450, 451, 455, 459, 461, 463, 472, 509, 510, 545, 550, 558, 567, 571, 580, 581, 685, 687, 690, 708, 725, 761; onion pests in, II. 381; pests of orchards and their control in, I. 25, 134, 163, 178, 418, 467, 510, 517, 528, II. 184, 208, 300, 347, 380, 390, 439, 484, 485, 555, 574, 648, 673, 707, III. 52, 57, 89, 115, 120, 139, 294, 301, 352, 413, 417, 422, 445, 461, 472, 475, 493, 508, 586, 631, 654, 659, 690, 733; pea pests in, III. 762; potato pests in, I. 428, II. 253, 280, 302; sugar-cane pests in, I. 104, 224, 225, III. 760; vine pests in, I. 112, II. 281; bionomics of *Aegeria novaroensis* on Douglas firs in, III. 669–671; Aphids in, III. 375, 573, 578, 631, 673; Argentine ant in, I. 325–328; bee diseases and pests in, II. 379, 417, 531; new Cerambycidae from, III. 546; bionomics of *Chloridea obsoleta* in, III. 470; parasites of *Cirphis unipuncta* in, III. 423, 458; bionomics of *Conophthorus* spp. on pines in, III. 667, 668; *Diabrotica* spp. in, I. 429, 430, 431; bionomics of *Draeculacephala mollipes* on cereals in, III. 576; parasites of *Eucosma ocellana* in, III. 584; bionomics of *Euzophera semifuneralis* in, III. 654; flea-beetles of, I. 298–300; bionomics of *Gargaphia solani* in, III. 575; control of gipsy and brown-tail moths in, I. 33–36, 53, 141, 148, 154, 233, 290, II. 101–103, 136, 156, 186–188, 250, 251, 294, 393, 711, III. 43, 86, 194, 328, 330, 354, 357, 369, 372, 507, 513, 516, 531, 549, 657, 668, 710, 715–717; bionomics of *Hymenia perspectalis* in, I. 291; parasitic Hymenoptera of, III. 131, 151, 418, 565, 658, 691, 724, 753; experiments in controlling *Lygus pratensis* in, III. 571; life-history of *Macrosiphum viticola* in, III. 566;

bionomics of *Myochrous denticollis* on maize in, III. 573–575; bionomics and control of *Pemphigus betae* in, III. 578; bionomics of *Phorodon humuli* in, I. 241; Sarcophagid parasites of grasshoppers in, III. 81; spider mites of, III. 63, 306; control of termites in, III. 378; thrips in, III. 566, 571, 577; new Tingitidae from, II. 664; insect pests imported into, III. 117, 419, 421, 454, 463; legislation against insect pests in, I. 85, 234, 269, 428, II. 91, 185, 187, 250, 294, 344, 385, 394, 418, 460, 716, III. 43, 121, 274, 330, 335, 364, 421, 424, 513, 516, 555, 624, 657, 665; economic entomology in, I. 108, 109, III. 9, 42, 233, 353; economic value of birds in, I. 235, III. 377, 379, 559; relation between Aphids and fire-blight in, III. 685; analyses of materials sold as insecticides in, II. 546; investigations on insecticides in, III. 737; new sprays in, III. 707, 708; (see also under separate States).

Universal Ant Destroyer, against termites, I. 355, 465, 466, II. 133, 157, 512, III. 166, 489, 713.

ununguis, Paratetranychus (*Tetranychus*).

Urania Green, as an insecticide, III. 42, 203, 397, 637.

Urellia amoena, on lettuce in France, I. 504.

Urena lobata, Tetranychus bioculatus on, in India, I. 508.

urichi, Horismenus.

Urocerus, in N. America, I. 255.

Urodus (*Trichostibas*) *parvula*, on bay trees in Florida, III. 326.

Urogaster (*Apanteles*) *canatsiae*, parasite of *Polychrosis viteana* in U.S.A., I. 113.

Uromenus (*Ephippigera*) *rugosicollis* in Sicily, III. 40.

Urostigma, Cryptarthrum walkeri on, in Dammar Island, I. 351.

urozonus, Eupelmus.

Urtica, Aphis urticaria on, in England, III. 633; *Sciaphobus squalidus* on, in Russia, II. 337.

Urtica dioica (see Nettle).

urticae, Aphidius.

urticana, Olethreutes.

urticaria, Aphis.

Uruguay, *Cydia pomonella* in, II. 162; *Prospaltella* parasite of *Aulacaspis pentagona* in, II. 477.

usambarica, Chionaspis.

usambariensis, Eutermes.

usambica, Dirphya (*Nitocris*).

Ustilago panici miliacei, infesting millet, III. 544.

Utah, insect pests in, I. 40, 238, 324, II. 115, 288, 294, III. 130, 139, 141, 466.

utahensis, Closterocerus; *Opius.*

Utetes anastrephae (see *Opius*).

utilis, Sarcophaga.

uvae, Aspidiotus.

uzeli, Gynaikothrips.

V.

V-Moth (see *Thamnonoma wavaria*).

vacciniana, Rhopobota.

vaccinii, Mineola; *Perrisia.*

Vaccinium (Blueberry), various spp. of, attacked by *Rhagoletis pomonella* in U.S.A., III. 57, 89.

Vacuna carlucciana, sp. n., on chestnut in Italy, III. 55.

Vacuna castaneae, sp. n., on chestnut in Italy, III. 55.

vadatorius, Amblyteles.

vagabunda, Mordwilkoja.

vagabundus, Pipunculus.

vagans, Neopharsalia.

valens, Dendroctonus.

Valeriana officinalis (Valerian), *Macrosiphum centranthi* on, in Britain, III. 762; *Xanthoecia flavago* (*Gortyna ochracea*) on, I. 410.

Valgus canaliculatus, associated with termites in decaying wood in U.S.A., III. 379.

valgus, Lachnopus.

validirostris, Pissodes.

validus, Pseudanthonomus; *Thrips.*

Vallota, *Merodon equestris* on, II. 88, 246.

Vancouver, insect pests in, I. 86, 87, 201, 299, 401, 413, II. 382, 676, III. 2, 19.

Vanda spathulata, Lepidosaphes vandae on, in Ceylon, III. 755.

vandae, Lepidosaphes.

Vanellus cristatus (Plover), destroying *Barathra brassicae* in Russia, II. 504.

Vanessa, experiments with flacherie and, II. 528.

Vanessa antiopa (Spiny Elm Caterpillar), experiments with *Sturmia scutellata* and, II. 104; experiments with zinc arsenite and, I. 284; food-plants of, in U.S.A., III. 162, 515; parasitised by *Phorocera*, III. 252.

Vanessa californica, bionomics of, in N. America, I. 84, 177, 339, 413.

Vanessa cardui (see *Pyrameis*).

Vanessa io, on hops in Russia, III. 606; experiments with nicotine and, II. 50.

Vanessa levana, experiments with *Pimpla* and, II. 215.
Vanessa polychloros, on elm, etc., in Barbary, III. 427; on cherry in Portugal, I. 313; food-plants of, in Russia, II. 341, 515, III. 221, 225, 393; experiments with nicotine and, II. 50.
Vanessa polychloros var. *erythromelas*, food-plants of, in Barbary, III. 427.
Vanessa tammeamea, parasites of, in Hawaii, III. 681, 682.
vanessae, *Apanteles*.
Vanilla, pests of, in Madagascar, III. 57; pests of, in Réunion, II. 216; *Tyroglyphus* spp. associated with, in Russia, II. 503; not seriously damaged by *Technomyrmex albipes* in Seychelles, III. 627.
vaporariorum, *Aleurodes*.
Vaporite, as an insecticide, I. 145, 220, 263, 387.
Vapourer Moth (see *Orgyia antiqua*).
varia, *Codophila*; *Nemorilla*; *Tomaspis* (see *T. saccharina*).
variabilis, *Celes*; *Cremnops*; *Hypera*; *Hyponomeuta*; *Mylabris* (*Zonabris*).
varians, *Aphis*.
variator, *Bracon*.
varicolor, *Eurytoma*.
varicornis, *Disonycha*; *Leptocorisa*; *Luperodes*; *Phygadeuon*; *Physcus*.
variegana, *Argyroploce* (*Olethreutes*).
variegata, *Antestia*; *Clania*; *Coccinella* (*Adonia*); *Echthromorpha*; *Tragocephala*.
Variegated Cutworm (see *Lycophotia margaritosa*).
variegatum afra, *Atoposoma*.
variegatus, *Anthribus*; *Brachytarsus*; *Kermes* (see *K. roboris*); *Menetypus*; *Zonocerus*.
variipes, *Derostenus*.
variolarius, *Euschistus*.
variolosum, *Asterolecanium*.
variolosus, *Empicoris*.
varipenne, *Xiphidium*.
varipes, *Apion*; *Promecotheca*; *Rhembastus*.
varium, *Apion*.
varius, *Acanthoderes*; *Anthribus*; *Clytus*; *Prococcophagus*.
vassilievi, *Acyrthosiphon*; *Homoporus*; *Telenomus*.
vastatrix, *Hemeleia*; *Phylloxera*; *Pyrausta*.
vatia, *Misumena*.
Vedalia cardinalis (see *Novius*).
Vegetable Marrow, pests of, in France, I. 504; *Dacus bipartitus* on, in Gold Coast, II. 672.
vejdovskyi, *Ortheziola*.
velatus, *Xyleborus*.
velleda, *Tolype*.
velox, *Oxya*.
Velvet Bean, *Orgyia postica* on, in Ceylon, III. 61; not attacked by *Agromyza fabalis* in Rhodesia, I. 290; (see Beans, Velvet).
Velvet Bean Caterpillar (see *Anticarsia gemmatalis*).
venablesi, *Limonius*.
venaefuscae, *Macrosiphum*.
venafuscus, *Prociphilus*.
venata, *Anaphe*.
venerabilis, *Feltia*.
venezolanus, *Calotermes*.
Venezuela, *Chrysomphalus biformis* imported into New Jersey on orchids from, III. 354, 455; coca pests in, II. 462; Coccids on oranges in, II. 628; *Eriopus floridensis* in, II. 92; *Melittia satyriniformis* in, III. 510.
venosata, *Diatraea*.
ventrale, *Rhynchium*.
ventralis, *Omocestus*; *Rhizobius*.
ventricosus, *Pteronus* (*Nematus*) (see *P. ribesii*); *Pediculoides*.
ventruosum, *Asterolecanium*.
Venusia verriculata, bionomics of, in New Zealand, III. 721, 722.
venusta, *Schistocerca*.
venustus, *Tetrastichus*.
Veratrum album (Hellebore), powdered root of, as an insecticide, II. 561; extract of, III. 440, 505.
Veratrum nigrum, extract of, against *Pieris brassicae*, III. 440.
Veratrum viride, extract of, III. 505.
verbasci, *Anthrenus*; *Campylomma*.
Verbascum, food-plant of *Adelphocoris lineolatus*, II. 425.
Verbascum sinuatum (Mullein), *Lygus pratensis* on, in U.S.A., I. 182; *Phthorimaea operculella* on, II. 401.
Verbascum thapsus (Aaron's Rod), pests on, in Canada and U.S.A., III. 659, 725; *Eurydema oleracea* on, in Denmark, III. 246; food-plant of *Xanthoecia flavago* (*Goryna ochracea*), I. 410, 434.
Verbena, *Olethreutes hebesana* on, in Canada and U.S.A., III. 659.
Verbena Bud Moth (see *Olethreutes hebesana*).
vericauda, *Sarcophaga*.
Vermilion Egg-parasite of Frog-hoppers (see *Oligosita girault*i).
Vermont, grasshoppers on lucerne in, III. 297; *Rhagoletis pomonella* in, III. 57.
Vermorel's Colloidal Soap Spray, formula for, III. 293.

vernalis, Livia.
vernata, Callochroa (see *Euclea indetermina*); *Palaeacrita.*
Veronica, Myzus cerasi on, in Russia, III. 639.
Veronica beccabunga, Phaedon cochleariae on, in Sweden, III. 346.
verriculata, Venusia.
verrucicollis, Moechotypa.
verrucifera, Madica.
verrucivora, Tettigonia (*Decticus*).
Verschaffeltia, rhinoceros beetle on, in Seychelles, II. 568.
Verschaffeltia splendida, Oryctes rhinoceros on, in Straits Settlements, II. 99.
versicolor, Dindymus; *Glyciphana*; *Meteorus.*
versutus, Adoretus.
vertebratus, Dacus.
verticalis, Pachybruchus.
verticillata, Phytometra (*Plusia*).
Verticillium heterocladum (Cinnamon Fungus), infesting whiteflies and scale-insects in Florida, I. 266, II. 129, III. 23; infesting vine pests in Russia, III. 211.
vesicalis, Pachypappa.
vesicator, Pontania (*Nematus*).
vesicatoria, Lytta.
Vespa cincta, predaceous on locusts in Malaya, III. 467.
Vespa crabro, on vines in Italy, III. 112; damaging apples, etc., in New Jersey, III. 194, 515.
Vespa germanica, predaceous on *Pteronus ribesii* in Ireland, III. 97; on vines in Italy, III. 112.
Vespa norvegica, predaceous on *Pteronus ribesii* in Ireland, III. 97.
Vespa orientalis, on vines in Italy, III. 112.
Vespa rufa var. *austriaca*, predaceous on *Pteronus ribesii* in Ireland, III. 97.
Vespa vulgaris, on vines in Italy, III. 112.
Vespamima sequoia (Sequoia Pitch Moth), bionomics of, in Montana, II. 645, III. 670.
vespertinus, Monocrepidius.
Vesperus xatarti, on vines in France, II. 608; on vines in Italy, III. 112; in vineyards in Spain, I. 190.
vespiformis, Franklinothrips.
vesta, Acraea (*Pareba*).
vestalis, Atractodes (see *A. tenebricosus*).
vestigialis, Angitia.
vestita, Rhopaea; *Saperda.*
vestiticida, Microbracon; *Triaspis.*
vestitus, Anthonomus.
Vetch (*Vicia sativa*), pests of, in Canada and U.S.A., I. 412, III. 153, 333, 576; pests of, in Denmark, III. 246; *Acyrthosiphon* (*Siphonophora*) *pisi* on, in England, I. 434; pests of, in France, I. 227, II. 577; pests of, in Germany, II. 500, III. 102; pests of, in Russia, I. 459, II. 262, 315, 340, 370, 648, III. 47, 106, 205, 443, 479, 480; avoided by *Euxoa segetum* in Russia, II. 197; not attacked by *Oria musculosa*, II. 319.
vetusta, Hemerocampa; *Orgyia*; *Porosagrotis*; *Nephus.*
Vibidia duodecimguttata (see *Halyzia*).
Viborquia spinosa, II. 308.
vibrissata, Erynnia (*Parerynnia*).
viburni, Aphis; *Galerucella.*
Viburnum, Heliothrips haemorrhoidalis on, in Russia, II. 267; not attacked by *Lymantria dispar* in U.S.A., III. 669; *Aphis rumicis* (*euonymi*) on, II. 236; vine moths on, I. 71.
Viburnum lantana (Wayfaring Tree), vine moths on, in Russia, III. 210.
Viburnum opulus (Guelder Rose), *Galerucella viburni* on, in Astrachan, II. 36; eggs of *Clysia ambiguella* on, in Germany, I. 7; *Clysia ambiguella* on, in Russia, III. 210; *Zeuzera* in, in U.S.A., I. 3; *Aphis rumicis* (*euonymi*) on, II. 17, III. 542.
Viburnum opulus nana, Galerucella viburni on, in Holland, III. 742.
Viburnum prunifolium, Macrosiphum viticola on, in U.S.A., III. 567.
Vicia cracca, food-plant of *Acyrthosiphon pisi* in Russia, III. 703, 704.
Vicia sativa (see Vetch).
viciae, Aphis; *Apion*; *Megoura*; *Perrisia.*
vicina, Chilomenes; *Chortophila* (*Pegomyia*); *Memnia.*
vicinum, Apion.
vicinus, Homalotylus.
Victoria, insect pests in, I. 195, 320, 513, 514, II. 117–119, 205, 493, 511, 688, 705, III. 78, 97, 362, 366.
vigintiduopunctata, Epilachna; *Halyzia* (*Thea*).
vigintioctopunctata, Epilachna.
vigintiquatuorpunctata, Subcoccinella.
Vigna catjang, pests of, in Dutch East Indies, III. 203, 248, 645.
Vigna sinensis (see Cowpea).

villica, Arctia.
villosa, Lagria; *Photinia.*
villosum, Elaphidion.
viminalis, Chaitophorus; *Lachnus*; *Trichiocampus* (*Cladius*).
viminetorum, Apanteles.
vincentiae, Cyclocephala.
vinculata, Pseudotrimerotropis (*Trimerotropis*).
Vine, Grape (*Vitis vinifera*), pests of, in S. Africa and their control, II. 84, 298-300, 653, 654, III. 502; pests of, in Algeria, II. 443-445, 446, 510, 595, 596; *Aphis ampelophaga* on, in Argentina, III. 55; pests of, in Australia, I. 195, 513, II. 119, 205, III. 78, 652; pests of, in Britain, II. 101, 563, 628, III. 101, 501, 660; pests of, in Canada and U.S.A., I. 54, 93, 112-114, 180, 225, 265, 269, 276, 298, 299, 403-405, 418, 475, II. 113, 116, 183, 390, 435, 555, 601, III. 16, 52, 85, 121, 181, 191, 193, 328, 420, 493, 511, 545, 556, 566, 653, 709, 734; *Cryptothrips brevicollis* on, in Cyprus, III. 749, 750; pests of, in Egypt, II. 505, 506; bionomics and control of pests of, in Central Europe, I. 5-10, 18, 70-73, 166, 173, 220, 221, 222, 228, 243-245, 248, 250, 273, 274, 311, 315, 331, 332, 335, 337, 338, 356, 380, 382, 392, 393, 397, 415-417, 419, 421, 428, 451, 466, 468-470, 472, 523, 529, 530, 542, 544, II. 9, 13, 16, 25, 91, 127, 135, 156, 182, 194, 195-197, 211, 228, 229, 233, 239, 240, 290, 293, 297, 301, 309, 323, 329, 335, 336, 346, 359, 360, 362, 363, 364, 398, 400, 402, 405, 409, 410, 411, 418, 421, 451, 452, 453, 486, 499, 517, 518, 537, 539, 550-552, 552, 553, 556, 557, 586, 587, 588, 589, 593, 605, 607-609, 610, 611, 631, 632, 633, 635, 657, 658, 666, 668, 679, 680, 681, 682-684, 684, 685, III. 10, 33, 40, 112, 118, 124, 160, 188, 386, 496, 497, 522, 523, 525, 561-563, 614, 615, 616, 658, 763, 764, 767; bionomics of *Phylloxera* on, in Europe and America, III. 763-767; pests of, in Greece, I. 409; *Dacus* (*Bactrocera*) *cucurbitae* on, in Hawaii, III. 163; *Otiorrhynchus picipes* on, in Holland, III. 198; pests of, in India, III. 145; pests of, in Japan, II. 113, III. 127; legislation against introduction of, into Mauritius, I. 399; pests of, in Portugal, I. 100; pests of, in Russia, I. 363, 460, 461, 478, 487, 488, 532, 536, II. 43, 52, 167, 267, 354, 355, 366, 465, 467, 495, 522, 625-627, 638, 692, 715, III. 26, 42, 46, 130, 172, 209-212, 219, 223, 226, 395, 441, 477, 535, 538, 543, 592, 601, 602, 701; spinning mites on, in Sweden, III. 253; not attacked by *Lymantria dispar* in U.S.A., III. 689; pests of, in West Indies, I. 97, II. 276; legislation against pests of, I. 274, 399, 542, II. 83, 84, 167, 496, 627, III. 405.
Vine Flea-beetle (see *Haltica ampelophaga*).
Vine Louse (see *Phylloxera vastatrix*).
Vine Mildew (see *Plasmopora viticola* and *Oidium*).
Vine Mite (see *Eriophyes vitis*).
Vine Moths (see *Clysia, Polychrosis*, and *Sparganothis*).
Vine Sphinx (see *Pergesa elpenor*).
Vine Tortrix (see *Sparganothis pilleriana*).
Vine Weevil (see *Otiorrhynchus sulcatus*).
vininga, Aslauga.
vinitor, Nysius.
vinsoni, Ceroplastes.
Vinsonia stellifera (Glassy Star Scale), on coconut and rubber in Br. Guiana, II. 417, 569; on Citrus in India, I. 279; in Seychelles, I. 76, II. 567; on mango imported into U.S.A., from Java, II. 460; in West Indies, I. 97, III. 87, III. 650.
vinsonioides, Ceroplastes.
vinula, Dicranura (*Harpyia*).
Viola, Neotoxoptera violae on, in Transvaal, III. 749.
violacea, Magdalis; *Necrobia.*
violacella, Gracilaria.
violaceum, Callidium; *Apion.*
violaceus, Carabus; *Pleurotropis*; *Rhynchites betuleti.*
violae, Eriophyes; *Neotoxoptera*; *Rhopalosiphum.*
violascens, Trionymus.
Violet, *Apocellus sphaericollis* on in U.S.A., III. 550; *Tetranychus telarius* (*bimaculatus*) on, I. 241, 353, II. 83, 703, III. 64, 566.
Violet Rove-beetle (see *Apocellus sphaericollis*).
Violet Sawfly (see *Hoplocampa canadensis*).
Virachola isocrates, in India, III. 145.
Virachola livia (Pomegranate Butterfly), on *Acacia edgworthi* at Aden, II. 321; on pomegranate, dates, etc., in Egypt, II. 321.
virens, Apion; *Monodontomerus.*

Vireo griseus, destroying *Diabrotica duodecimpunctata* in U.S.A., I. **431.**
virescens, Chloridea; *Phosphorus.*
virgatus, Pseudococcus.
Virgin Islands, insect pests in, I. **82, 83,** II. **87, 88, 144, 693.**
virginalis, Campoplex.
Virginia, parasites of Coccinellids in, II. **131, 132**; insect pests in, I. **102, 295, 546,** II. **140, 193, 253, 280, 433, 524,** III. **89, 115, 155, 378, 475, 579.**
Virginia Creeper (*Ampelopsis quinquefolia*), restrictions as to removal of, in S. Africa, II. **84**; pests on, in N. America, I. **225, 277, 298, 404**; *Aulacaspis pentagona* on, in Italy, I. **222**; *Polychrosis botrana* on, in Russia, III. **210.**
virginiana, Rhyacionia (*Evetria*); *Haematis.*
virginianus, Lagarotis.
virginica, Ctenucha; *Diacrisia.*
virginicus, Leucotermes.
virginiensis, Chalcophora; *Notopygus.*
virguncula, Porthesia.
viridana, Tortrix; *Cantharis*; *Peucetia.*
viridanus, Chermes.
viride, Lecanium (see *Coccus viridis*).
viridescens, Glyphe.
viridifasciata, Chortophaga.
viridipennis, Lagria.
viridis, Aeolopus (*Epacromia*); *Agrilus*; *Callochroa*; *Cassida*; *Chermes*; *Coccus* (*Lecanium*); *Doloessa*; *Metriocharis*; *Rhizobius.*
viridissima, Ceratina; *Phasgonura* (*Locusta*).
viridula, Chlorita; *Gastroidea*; *Nezara.*
viridulus, Chermes.
viteana, Polychrosis.
vitellinae, Phyllodecta (*Phratora*); *Trichiosoma.*
vitessoides, Heortia.
Viteus vitifolii (see *Phylloxera*).
Vitex agnus-castus, mites on, in Egypt, II. **505.**
Vitex cuneata, Pseudococcus filamentosus on, in East Africa, II. **146.**
viticida, Fidia.
viticola, Aspidiotus; *Contarinia*; *Drepanothrips*; *Macrosiphum.*
vitifolii, Phylloxera (*Viteus*).
Vitis, various spp. of, attacked by *Phylloxera*, I. **18, 19**; (see Vine).
Vitis sicyoides, scale-insects on, in Barbados, II. **533.**
Vitis vinifera (see Vine).
vitis, Adoxus (*Bromius, Eumolpus*); *Anomala*; *Eriophyes* (*Phytoptus*); *Phyllocoptes*; *Pseudococcus*; *Pteromalus*; *Pulvinaria.*
vitium, Margarodes.
vitreus, Mesochorus.
vitripennis, Hyaloides.
vittata, Cassida; *Diabrotica*; *Epicauta*; *Phyllotreta.*
vittaticollis, Agrilus.
vittatus, Collops; *Melanoplus*; *Prepodes* (*Praepodes*).
vittigera, Chelinidea.
vittipennis, Orthocephalus.
vittula, Phyllotreta (*Haltica, Plectroscelis*).
Vitula bodkini, destroying Lepidopterous larvae in Br. Guiana, II. **416.**
Vitula toboga, destroying Lepidopterous larvae in Br. Guiana, II. **416.**
Viviania georgiae, parasite of *Calosomasy cophanta* in U.S.A., III. **717.**
vivida, Parasa.
vividus, Scymnus.
Volucella bombylans (*mystacea*), in onions in Russia, III. **104.**
volucre, Praon.
volucris, Eupeodes.
volupis, Dictyna.
vorax, Apion; *Muscidifurax* (see *M. raptor*).
vuilleti, Bruchocida; *Chrysopa*; *Lophococcus.*
vulgare, Armadillidium.
vulgaris, Agathis; *Calluna*; *Chrysopa*; *Exorista*; *Glypta*; *Gryllotalpa* (see *G. gryllotalpa*); *Melolontha* (see *M. melolontha*); *Omaseus*; *Phryxe* (*Blepharidea, Exorista*); *Phytodietus*; *Pterostichus* (*Feronia*); *Sturnus*; *Vespa.*
vulgatissima, Phyllodecta (*Phratora*).
vulnerata, Typhlocyba.
vulnerator, Pristomerus.
vulneratus, Ophion.
Vulpia, Aphis vulpiae on, in Italy, III. **54.**
vulpiae, Aphis.
vulpinus, Dermestes.
vuteria, Sesamia.

W.

W-marked Cutworm (see *Agrotis unicolor*).
Wagneria sequax, parasite of *Cirphis unipuncta* in U.S.A., III. **369, 552.**
Wagtail, destroying insects, I. **479,** II. **39.**
wahlbergi, Pseudocreobotra.
waitei, Tarsonemus.
waldeni, Kermes.
walkeri, Artona; *Cryptarthrum.*

Walkeriana, on citrus in Ceylon, II. 652.
Walkeriana kandyensis, parasitised by *Cryptochaetum curtipenne* in Ceylon, II. 307.
walkeriana, Arthrocnodax.
Wallflower, *Pemphigus lactucarius* on, in Britain, I. 434.
Walnut (*Juglans*), *Haplocnemia curculionoides* on, in France, III. 11; *Scolytus geoffroyi* on, in Germany, I. 150; *Orchestes fagi* on, in Holland, III. 743; pests of, in Italy, III. 124; *Aspidiotus juglans-regiae* on, in Peru, III. 135; pests of, in Russia, I. 368, II. 42, 419, 640, 672, 715, III. 45, 206, 225, 226; *Eriophyes tristriatus* on, in Scotland, II. 498; pests of, in U.S.A., I. 52, 69, 181, 225, 325, 426, 427, II. 117, 287, 390, 435, 438, 555, 581, 582, 599, 600, 674, 707, III. 141, 150, 457, 493, 552, 581, 671, 709; *Aulacaspis pentagona* on, I. 222; not attacked by *Tetranychus telarius* in U.S.A., III. 64; not attacked by *Lymantria dispar* in U.S.A., III. 669.
Walnut, Black (see *Juglans nigra*).
Walnut Aphis (see *Chromaphis juglandicola*).
Walnut Bud Moth (see *Acrobasis caryae*).
Walnut-leaf Mite (see *Eriophyes tristriatus*, var. *erineus*).
Walnut Mealy Bug (see *Pseudococcus bakeri*).
Walnut Red-necked Caterpillar (see *Datana integerrima*).
Walnut Scale, English (see *Aspidiotus juglans-regiae*).
Walnut Weevil (see *Conotrachelus juglandis*).
Wandering Jew (*Saxifraga sarmentosa*), not attacked by *Tetranychus telarius* in U.S.A., III. 64.
Warbler, destroying insects, III. 420.
waringi, Ocinaria.
Warneria thunbergia, Aleurodes citri on, in Hawaii, III. 548.
Wasps, on vines, etc., in New Jersey, III. 194, 515; on vines in Europe, III. 26, 112; destroying bees and other insects, I. 27, 331, II. 28, 49, 60, 533, III. 97, 359; methods of destroying nests of, II. 65.
Water, Hot, use of, against vine moths, II. 444, 626, 679, 686, III. 522, 563, 564, 614, 616; (see Steam).
Watercress, *Crocidolomia binotalis* on, in Zanzibar, III. 125; *Aphis rumicis* on, II. 494.
Water-hyacinth (see *Eichornia crassipes*).
Water-lily, *Lissorhoptrus simplex* on, in U.S.A., I. 151.
Water-melon (*Cucumis citrullus*), pests of, in California, I. 385, III. 494; pests of, in Costa Rica, I. 341; *Dacus* (*Bactrocera*) *cucurbitae* on, in Hawaii, III. 163; pests of, in Russia, III. 47, 486, 601; *Aphis gossypii* on, in St. Vincent, III. 412; not attacked by *Laphygma frugiperda* in U.S.A., I. 517.
Water-plantain (see *Alisma plantago-aquatica*).
Wattle (*Acacia*), pests of, in E. Africa, I. 414, II. 570; pests of, in S. Africa, I. 13, 303, III. 502; *Orthorrhinus klugi* on, in Australia, I. 195.
Wattle Bagworm (see *Chalioides junodi*).
Wattle Cicada (see *Melampsalta incepta*).
wavaria, Thamnonoma (*Halia*).
Wavy-striped Flea-beetle (see *Phyllotreta sinuata*).
Wax Moth, Larger (see *Galleria mellonella*).
Wax Moth, Lesser (see *Achroia grisella*).
Wax Scale (see *Ceroplastes* spp.).
Waxy Whitefly (see *Paraleurodes perseae*).
Wayfaring Tree (*Viburnum lantana*), vine moths on, in Russia, III. 210.
Weasels, destroying insects, I. 464.
Web-worm, Beet (see *Phlyctaenodes sticticalis*).
Web-worm, Fall (see *Hyphantria textor*).
Web-worm, Spotted (see *Hymenia perspectalis*).
webberi, Aegerita.
websteri, Agromyza; *Diaulinus.*
Weigelia, Poecilocapsus lineatus on, in Canada, III. 553.
weldoni, Tetranychus.
Wesmaelia rileyi (see *Eupachylomma*).
West African Oil Palm (see *Elaeis guineensis*).
West Indian Peach Scale (see *Aulacaspis pentagona*).
West Indian Red Scale (see *Selenaspidus articulatus*).
West Indies, insect pests in, I. 83, 99, 103, 136, 163, 189, 217, 263, 351, 389, II. 31, 86-88, 104, 191, 506, 531, 640, III. 21, 73, 555, 627, 662, 663, 736; (see also under the various islands).
westermanni, Camenta.

Western Army Cutworm (see *Euxoa agrestis*).
Western Cabbage Beetle (see *Phyllotreta pusilla*).
Western Cucumber Beetle (see *Diabrotica soror*).
Western Peach Borer (see *Aegeria pacifica*).
Western Potato Flea-Beetle (see *Epitrix subcrinita*).
Western Root Borer (see *Aegeria opalescens*).
Western Rose Chafer (see *Macrodactylus uniformis*).
Western Spruce Gall Louse (see *Chermes similis*).
Western Striped Flea-beetle (see *Phyllotreta ramosa*).
Western Tussock Moth (see *Hemerocampa vetusta*).
Western Twelve-spotted Cucumber Beetle (see *Diabrotica duodecimpunctata*).
Western Wheat-stem Sawfly (see *Cephus occidentalis*).
Western White Pine (see *Pinus monticola*).
Western Yellow-pine Cone Beetle (see *Conophthorus ponderosae*).
westwoodi, Hierodula.
Whale Oil, relative attractiveness of, for *Ceratitis capitata*, III. 28.
Whale Oil Soap, formulae containing, I. 131, 187, 242, 512, II. 23, 58, 387, 512, 527, III. 122, 155, 178, 193, 288, 326, 363, 473, 620, 673; value of, as an adhesive, III. 295.
Wheat (*Triticum*), Aphids on, in Africa, I. 39, II. 153-155, 299, 570, III. 756; pests of, in Algeria, I. 375, 422, II. 231-233; pests of, in Austria, II. 429, 453, 475, 476; pests of, in Britain, I. 434, II. 285, 656, III. 9; pests of, in Canada and U.S.A., I. 225, 265, 326, 383, 401, 412, 430, 453, II. 46, 120, 225, 226, 227, 492, 536, 696, III. 18, 70, 290, 298, 333, 351, 368, 416, 507, 509, 529, 533, 553, 576, 577, 588, 629, 630, 708; pests of, in Denmark, III. 246, 247; pests of, in France, I. 169, 226, 451; pests of, in Holland, I. 386, III. 199, 200, 665, 740, 743; pests of, in India, II. 68, 69, III. 157, 345; pests of, in Italy, II. 511, III. 40; pests of, in Russia, I. 357, 358, 359, 364, 446, 447, 457, 458, 459, 479, 484, 486, 490, 494, 495, 527, 534, 541, II. 5, 34, 40, 43, 73, 170-173, 319, 333, 342, 350-353, 370-372, 468, 470-473, 648, 716, 718, III. 5, 41, 45, 50, 67, 75, 92, 94, 103, 110, 206, 220, 221, 230, 237, 242, 307, 338, 340, 402, 403, 478, 479, 481, 487, 537, 543, 600, 610, 635, 639, 700; *Laphygma exempta* on, in Rhodesia, III. 359; grasshoppers on, in Spain, I. 421; not attacked by *Heterodera radicicola*, III. 178; *Rhizobius graminis* on, III. 749.
Wheat Aphis (see *Toxoptera graminum*).
Wheat Chafer (see *Anisoplia austriaca*).
Wheat Fly (see *Hylemyia coarctata*).
Wheat Midge (see *Contarinia tritici*).
Wheat Stem Maggot (see *Meromyza americana*).
Wheat Stem Sawfly (see *Cephus pygmaeus*).
Wheat Wireworm (see *Agriotes mancus*).
White Ants (see Termites)
White-banded Cherry Fruit-fly (see *Rhagoletis cingulata*).
White Beam (see *Pyrus aria*).
White Climbing Cutworm (see *Lycophotia scandens*).
White Coffee Borer (see *Anthores leuconotus*).
Whitefly (see *Aleurodes* spp.).
White-fringed Fungus (see *Microcera*).
White-headed Fungus (see *Ophionectria coccicola*).
White Grubs (see *Lachnosterna*).
White Lead, in mixture against woolly aphis, II. 293, 604.
White-lined Morning Sphinx (see *Celerio lineata*).
White-marked Tussock Moth (see *Hemerocampa leucostigma*).
White Mould of Tomatoes, caused by *Eriophyes calacladophora*, III. 178.
White Muscardine Fungus (see *Botrytis bassiana*).
White Pine (see *Pinus strobus*).
White Pine Weevil (see *Pissodes strobi*).
White Scale (see *Chionaspis citri*).
Whitethorn (see Hawthorn).
Whitewood (see *Tecoma leucoxylon*).
wiedemanni, Orellia.
Wild Cotton Weevil (see *Anthonomus grandis thurberiae*).
Wild Service-tree (*Pyrus torminalis*) *Eriophyes pyri* on, in Scotland, 498.
Wild Radish (*Raphanus raphanistrum*), *Contarinia nasturtii* on, in Britain, III. 500.
Wild Vetch (see *Vicia cracca*).
wildhami, Rhoptromeris.

willcocksi, Anoecia.
willcoxi, Calosoma.
willingana, Proteopteryx.
Willow (*Salix* spp.), *Vanessa polychloros* on, in Barbary, III. 427; *Leucaspis salicis* on, from Baluchistan, III. 345; pests of, in Britain, I. 401, 433, II. 192, 656, III. 660; *Melolontha* on, in Bukovina, II. 640; pests of, in Canada and U.S.A., I. 35, 101, 140, 149, 153, 161, 280, 298, 381, 467, II. 188, 294, 390, 435, 485, 599, 662, 711, III. 43, 85, 88, 162, 258, 335, 351, 494, 515, 530, 559, 579, 631, 668, 671, 734, 738; *Lachnus viminalis* on, in Egypt, III. 749; pests of, in France, I. 167, 333, II. 195, 290, III. 10; pests of, in Holland, I. 385, 386, II. 642, III. 742; pests of, in Italy, III. 124; *Hemichionaspis minor* on, in Peru, I. 323; *Aphis nigripes* on, in Pretoria, II. 276; pests of, in Russia, I. 318, 494, 499, II. 36, 314, 443, 636, 714, III. 13, 45, 93, 138, 220, 222, 223, 225, 399, 402; not attacked by *Lymantria dispar* in Russia and U.S.A., III. 43, 669; *Aspidiotus perniciosus* on, I. 472; food-plant of *Aulacaspis pentagona*, I. 222; (see also Osiers).
Willow-herb (see *Epilobium angustifolium*).
Willow Moth (see *Stilpnotia salicis*).
Willow Scale (see *Chionaspis salicis*).
wilsoni, Aulacophora.
Wilt Disease, in Lepidopterous larvae, I. 33, II. 101, 136, 485, III. 356.
Wine Lees, preparation of acetates of copper with, III. 739, 740.
winnanae, Pteronidea.
Winter Moth (see *Cheimatobia brumata*).
Winter Rocket (*Barbarea praecox*), *Chortophila brassicae* on, in France, III. 189.
Winterberry, not attacked by *Lymantria dispar* in U.S.A., III. 669.
Winthemia, in Canada, I. 114; parasite of *Cirphis unipuncta* in U.S.A., III. 18.
Winthemia fumiferanae, parasite of *Tortrix fumiferana* in U.S.A., I. 202.
Winthemia quadripustulata, parasite of *Episema coeruleocephala* in Russia, III. 639; parasite of cutworms in U.S.A., I. 547, III. 369, 371, 458, 552.
Wireworms, bionomics of, in U.S.A., III 298–300; methods of controlling, I. 358, 377, 505, II. 119, 159, 265, 303, 702, III. 112, 183, 205, 247, 300, 309, 426, 688; (see *Agriotes, Corymbites, Limonius*, etc.).
Wisconsin, insect pests in, I. 305, II. 121, 680, III. 113, 297, 328, 425, 530, 569.
Wistaria, insects intercepted on, in California, III. 455, 494, 558; borers of, in Iowa, III. 495.
wistariae, Chionaspis.
Witch-hazel (see *Ulmus montana*).
Witherite, barium chloride obtained from, III. 95.
wŏberiana, Enarmonia (*Grapholitha*).
Woburn Wash, formula for, II. 204, III. 490.
woglumi, Aleurocanthus.
wokiana, Albinia (see *Cryptoblabes gnidiella*).
Wolf Moth (see *Tinea granella*).
Wolfsbane, *Phlyctaenodes sticticalis* on, I. 40.
Wonder Bean, pests of, in E. Africa, II. 283.
Wonder-berry (see *Solanum nigrum*).
Wood Ants, legislation against, in Br. Guiana, III. 175.
Wood Leopard Moth (see *Zeuzera pyrina*).
Woodlice, economic importance of, in Great Britain, II. 597; (see *Armadillidium* and *Oniscus*).
Woodpeckers, destroying insects, I. 345, 366, II. 222, 306, 529, 535, 697, III. 190, 297, 342, 559.
Wood Pewee (*Myiochares virens*), destroying insects in U.S.A., II. 525, III. 380.
Wood Pigeon, an injurious bird, I. 305.
Wood Warblers, destroying insects, III. 420.
Woolly Aphis (see *Eriosoma lanigerum*).
Woolly Bear (see *Arctia caja*).
Woolly Larch Louse (see *Chermes laricis*).
Woolly Whitefly (see *Aleurodes howardi*).
Wormia biflora, Aspidiotus destructor on, in Fiji, I. 136.
Wormwood (*Artemisia absinthium*), pests on, in Russia, I. 360, II. 53, III. 219, 636; extract of, as an insecticide, I. 213, 492, II. 613; probably not a food-plant of *Acyrthosiphon pisi*, III. 704.
Wrens, destroying insects, I. 306, 478, II. 227, 306, 575.
wrightii, Dinapate.
Wyoming, insect pests in, III. 139, 297, 466.

X.

Xana nigra, sp. n., parasite of *Leucopis argentata* in Russia, III. 308.
xanthenes, *Hydroecia*.
xanthii, *Anuraphis*.
xanthipes, *Epicerchysius*.
Xanthium, *Anuraphis xanthii* on, in Argentina, III. 55. *Otiorrhynchus ligustici* on, in Russia, II. 465.
Xanthium spinosum (Cocklebur), *Myochrous denticollis* on, in U.S.A., III. 574.
Xanthoecia flavago (*Gortyna ochracea*), in Britain, I. 410, 434, III. 460; bionomics of, on artichokes in France, I. 339, 410, 434, 552, II. 420, 606, III. 33.
xanthogastrella, *Scirpophaga*.
Xanthogramma aegyptium, predaceous on Aphids in W. Africa, II. 107, 396, 631.
Xanthogramma scutellare, predaceous on Aphids in S. Africa, II. 47, 154.
xanthomelaena, *Disonycha*; *Galeruca*.
Xanthomelanodes peruanus, parasite of *Stenomacra* in Peru, I. 172.
xanthophila, *Earias* (see *E. insulana*).
Xanthopimpla punctata, parasite of *Sylepta derogata* in Nigeria, III. 164.
xanthopterus, *Dacus* (*Tridacus*).
xanthopus, *Geniocerus*; *Mycterophallus*.
Xanthorhoea praefectata, on *Phormium tenax* in New Zealand, III. 302.
Xanthorrhoea (Grass Tree), pests of, in Queensland, II. 511.
xanthostylum, *Apion*.
xanthothorax, *Calliephialtes*.
xatarti, *Vesperus*.
Xenoschesis gracilis, sp. n., in U.S.A., III. 691.
Xenoschesis slossonae, sp. n., in U.S.A., III. 691.
Xeris, in North America, I. 255.
Xestobium rufovillosum (*tessellatum*), in timber in Britain, III. 677; on oak in Sweden, III. 255.
Xiphidium fuscum, natural enemies of, in Russia, II. 474, 475.
Xiphidium varipenne, on tobacco in Hawaii, II. 630; destroying froghoppers in Trinidad, II. 96.
Xiphispa chalybeipennis (see *Oxycephala*).
Xiphodiplosis fulva, sp. n., parasite of *Saissetia nigra* in Ceylon, III. 725.
Xixuthrus costatus, on coconut in South Sea Islands, II. 2; on coconut in Java, II. 691.
xuthus, *Papilio*.
Xyleborus, on cotton in E. Africa, II. 447; on sugar-cane in Br. Guiana, I. 522, II. 58; on *Manihot glaziovii* in Ceylon, II. 192; in Germany, II. 563; on tobacco in Hawaii, II. 630; on rubber in Malaya, II. 133; on sugar-cane imported from Philippines, II. 461; on sugar-cane, coconut, etc., in West Indies, I. 185, 285, II. 49, III. 517, 661.
Xyleborus adumbratus, on *Pterocarpus indicus* in India, III. 723.
Xyleborus affinis, on rubber in tropical Africa, I. 351, II. 414, 415, 592, III. 649; on rubber in Hawaii, I. 351, II. 414; on sugar-cane in Mexico, I. 184.
Xyleborus ambasius, on *Hevea brasiliensis* in Kamerun, I. 351.
Xyleborus andrewesi, on *Shorea robusta* in India, III. 722.
Xyleborus aplanatus, sp. n., in Assam, II. 688.
Xyleborus arquatus, on camphor in Ceylon, II. 597.
Xyleborus aulmanni, on coffee in E. Africa, I. 414.
Xyleborus bengalensis (see *X. semigranosus*).
Xyleborus camerunus, on *Hevea brasiliensis* in Africa, I. 351, II. 592.
Xyleborus camphorae, on camphor in Mauritius, I. 351.
Xyleborus coffeae, on coffee in Ceylon and Far East, I. 5, 89, 351, II. 323, 490; Chalcid parasite of, in Java, III. 312.
Xyleborus cognatus, on *Hevea brasiliensis* in Asia and Africa, I. 351, II. 414.
Xyleborus compactus, on coffee and camphor in Ceylon, II. 323, 597, 643; on coffee in Far East, I. 122, 501.
Xyleborus confusus, on *Manihot glaziovii* in Africa and Brazil, I. 351, II. 194, 592; on cacao in New Guinea, I. 350.
Xyleborus destruens, on cacao in Java, I. 350.
Xyleborus discolor, on cacao and rubber in Ceylon, I. 89, 350.
Xyleborus (*Tomicus*) *dispar*, bionomics of, in Europe, I. 259-261, 340, II. 402, 486, 563, III. 107, 393, 436, 659, 743; in orchards in U.S.A., I. 130, 143.
Xyleborus dryographus, II. 414.

Xyleborus fornicatus (Tea Shot-hole Borer), bionomics and control of, in India and Ceylon, I. **87, 350, 351,** II. **158, 305, 323, 513, 643,** III. **12, 65, 83, 157, 666**; legislation against, in Ceylon, III. **65.**
Xyleborus fraternus, on teak in India, III. **723.**
Xyleborus gravelyi, sp. n., in Assam, II. **688.**
Xyleborus gravidus, on mahogany in Burma, I. **351.**
Xyleborus immaturus, on avocado pear in Hawaii, III. **411.**
Xyleborus interjectus, on *Hevea* in Ceylon, I. **89.**
Xyleborus laticollis, on *Shorea robusta* in India, III. **722.**
Xyleborus mancus, on cacao in Ceylon, I. **350.**
Xyleborus morstatti, on coffee in E. Africa, I. **351, 414.**
Xyleborus parvulus, on *Shorea robusta* in India, III. **722**; on rubber in Malaya, III. **12.**
Xyleborus perforans, on rubber in Br. Guiana, I. **139**; on *Hevea* in Ceylon, I. **89**; on *Shorea robusta* in India, III. **722**; on sugarcane in Java, I. **351**; on coconut in Jamaica, III. **650.**
Xyleborus saxeseni (see *X. xylographus*).
Xyleborus semigranosus, on cacao in Ceylon, I. **350**; on *Shorea robusta* in India, III. **722**; synonymy of, III. **706.**
Xyleborus semiopacus, on *Hevea* in Ceylon, I. **89.**
Xyleborus solidus, control of, on fruit trees in Australia, III. **492.**
Xyleborus spathipennis, on *Castilloa elastica* in Ecuador, I. **351.**
Xyleborus submarginatus, on *Shorea robusta* in India, III. **723.**
Xyleborus velatus, on teak in India, III. **723.**
Xyleborus xylographus (*saxeseni*), on prunes, etc., in U.S.A., I. **130,** II. **555,** III. **558**; bionomics of, in orchards in Europe, I. **259,** II. **486,** III. **436.**
Xylina antennata (Green Fruit Worm), bionomics of, in Canada and U.S.A., I. **290,** II. **190, 380, 560,** III. **69, 137, 358, 414.**
Xylina bethunei (see *Graptolitha*).
Xylina (*Calocampa*) *exoleta*, on lettuce and flax in France, I. **504,** III. **428**; on beet in Russia, I. **539.**
Xylococcus napiformis, sp. n., on *Quercus serrata* in Japan, III. **127.**
Xylocopa aeneipennis, boring in *Acacia koa* in Hawaii, III. **682.**
xylographus, *Xyleborus*.
Xylol, as an insecticide, III. **281, 284.**
Xylomyges (*Prodenia*) *eridania* (Semitropical Army Worm), in Porto Rico, III. **477**; on tomato in Florida, III. **179.**
Xylonites praeustus, bionomics of, on figs in France, II. **9,** III. **10.**
Xylonites retusus (*Apate sinuata*), on figs and vines in France, II. **196,** III. **10.**
Xylophanes tersa, on *Anona muricata* in Br. Guiana, I. **130.**
Xylophruridea agrili, parasite of *Agrilus vittaticollis* in U.S.A., III. **116.**
Xylopertha, on camphor in Ceylon, II. **597.**
xylosteana, *Cacoecia* (*Tortrix*).
xylostei, *Pemphigus*; *Hyadaphis*.
Xyloterus domesticus, on beech in Germany, II. **572.**
Xylosteum, *Rhopalosiphum pastinacae* on, in Colorado, III. **351.**
Xylotrechus nauticus, on walnut in California, II. **555.**
Xylotrechus quadripes, on coffee in Colombia, II. **708**; on coffee in Far East, II. **490.**
Xylotrupes, on rubber in Malaya, II. **133.**
Xylotrupes australicus (see *X. gideon*).
Xylotrupes lorquini, on coconut in South Sea Islands, II. **2.**
Xylotrupes gideon (*australicus, nimrod*), on coconut in Java and Far East, II. **2, 490, 689,** III. **714**; on *Poinciana* in Queensland, III. **491.**
Xymenia americana, new Coccids on, in W. Africa, I. **14.**
Xysticus, destroying other spiders in Russia, II. **64.**
Xystrocera festiva, on coffee in Far East, II. **490.**

Y.

Yam (*Dioscorea*), pests of, in W. Africa, II. **108, 671**; *Aspidiotus hartii* intercepted on, in California, III. **626**; *A. hartii* on, in Fiji, III. **548**; pests of, in Singapore, III. **723, 724**; pests of, in West Indies, I. **253,** II. **88.**
Yam Scale (see *Aspidiotus hartii*).
Yarrow (see *Achillea millefolium*).
Yautia, *Corythuca gossypii* on, in Porto Rico, III. **476.**
Yellow Bear Caterpillar (see *Diacrisis virginica*).

Yellow Clover Aphis (see *Aphis ononidis*).
Yellow Fungus (see *Aschersonia flavicitrina*).
Yellow-headed Coffee Borer (see *Dirphya princeps*).
Yellow-necked Apple-tree Caterpillar (see *Datana ministra*).
Yellow-necked Flea-beetle (see *Disonycha mellicollis*).
Yellow Scale (see *Chrysomphalus aurantii citrinus*).
Yellow Stalk Borer (see *Sesamia nonagrioides*).
Yellow Stonecrop (see *Sedum acre*).
Yellow-striped Flea-beetle (see *Phyllotreta undulata*).
Yellow Sweet Clover (see *Melilotus officinalis*).
Yellow Tea Mite (see *Tarsonemus translucens*).
Yellow Underwing Moth (see *Agrotis pronuba*).
Yerba-santa, *Pseudococcus yerbasantae* on, in California, I. 307, II. 436.
yerbae-santae, Pseudococcus.
Yew (*Taxus*), *Otiorrhynchus sulcatus* on, in Holland, I. 385.
yorkensis, Sphingonotus.
Yothers' Formula, against whitefly, I. 187, III. 33.
yothersi, Tenuipalpus.
Yponomeuta (see *Hyponomeuta*).
ypsilon, Agrotis ; Mormidea.
Ypsolophus pometellus (see *Dichomeris ligulella*).
Yucatan, *Coccobacillus* of grasshoppers in, I. 162, II. 461; *Toxotrypana curvicauda* in, I. 390.
Yucca australis, Ceroputo yuccae on, in California, II. 436.
Yucca filifera, Ceroputo yuccae on, in California, II. 436.
Yucca tricolor, Aspidiotus hederae intercepted on, in U.S.A., III. 117.
Yucca whipplei, Ceroputo yuccae on, in California, II. 436.
yuccae, Ceroputo.

Z.

Zabrus, in nest of *Lathrodectus tredecimguttatus* in Russia, III. 537.
Zabrus blaptoides, on wheat in Russia, III. 601.
Zabrus gibbus, on cereals in Belgium, II. 176, III. 50.
Zabrus tenebrioides (Corn Ground Beetle), on cereals in Hungary, II. 309; on cereals. etc., in Russia, II. 172, III. 93.
zachrysa, Gracilaria.
Zaglyptonotus schwarzi, parasite of *Smicronyx fulvus* in Colorado, III. 753.
Zagrammosoma multilineatum, parasite of *Leucoptera coffeella* in Porto Rico, III. 517; parasite of *Agromyza* spp. in U.S.A., II. 46, III. 133.
Zalophothrix, parasite of *Saissetia oleae* in California, I. 427.
Zalophothrix mirum, parasite of *Saissetia nigra* in Barbados, II. 143.
Zamelodia ludoviciana, destroying *Diabrotica duodecimpunctata* in U.S.A., I. 431.
Zamia, Chrysomphalus aonidum on, in Seychelles, II. 269.
zamiae, Diaspis (*Aulacaspis*).
Zanclognatha tarsicrinalis, on lettuce in France, I. 504.
Zanclognatha tarsiplumalis, on lettuce in France, I. 504.
Zanzibar, Coccidae of, I. 246, 258, II. 276; legislation against coconut pests in, I. 235; fruit-flies from, III. 748; pests of agriculture in, III. 124.
Zaratha cramerella (see *Acrocercops*).
Zea (see Maize).
zeae, Aphis.
zealandica, Odontria.
Zebra Caterpillar (see *Ceramica picta*).
zebraea, Mylabris (*Zonabris*).
Zebronia phenice, on cotton in S. Nigeria, II. 106.
Zele chlorophthalmus (see *Z. geminator*), III. 92.
Zele geminator, in England, III. 92.
Zele infumator, sp. n., in England, III. 92.
zelleriella, Argyresthia.
Zelus peregrinus, predaceous on *Dacus cucurbitae* in Hawaii, III. 29.
Zelus rubidus, in Antigua, I. 258; predaceous on *Laphygma frugiperda* in Porto Rico, III. 134, 477.
zemiodes, Mometa.
Zenillia pexops, parasite of *Lygaeonematus erichsoni* in Britain, III. 78, 79.
Zenillia pullata (*Trichochaeta polleniella*), parasite of *Phlyctaenodes sticticalis* in Russia, I. 535, III. 220.
zeteki, Icerya.
Zeteticontus abilis, parasite of *Carpophilus* in French Guinea, III. 433.
zetterstedti, Teleas (see *Telenomus truncatus*).
Zeuzera, in Java, I. 4, III. 312; on olive in Italy, I. 390; in U.S.A., I. 3; destroyed by birds, II. 148, III. 559.

Zeuzera aesculi (see *Z. pyrina*).
Zeuzera coffeae (Coffee Borer, Red Borer), on tea and cotton in Far East, II. 490, III. 661; bionomics of, in India and Ceylon, II. 151, 512, 643, III. 300, 706.
Zeuzera pyrina (*aesculi*) (Leopard Moth), on apple in England, II. 562; bionomics of, in France, I. 396, 397; on olive in Palestine, II. 623; on apples, etc., in Portugal, I. 313; bionomics of, on fruit trees in Russia, I. 460, II. 36, 42, 515, III. 51, 206, 220, 225, 393, 399, 544, 601, 610; on carob in Spain, III. 276; in U.S.A., III. 193, 515.
zeylanica, Parlatoria.
Zicrona coerulea, predaceous on vine pests in Europe, I. 173, 524, III. 7, 211, 538.
Zicrona flaveolatum, predaceous on *Clysia ambiguella* and *Polychrosis botrana*, I. 524.
zimmermanni, Perissopneumon; Phacosema; Stigmacoccus.
Zinc, insects boring in, in France, I. 42.
Zinc Arsenate, as an insecticide, III. 737.
Zinc Arsenite, advantages of, over lead arsenate, I. 407, III. 177; cactus solution as an adhesive in, III. 295; spray against *Diabrotica* spp., II. 161; and lime, III. 326; ineffective against *Limonius californicus*, II. 304; properties of, as an insecticide, I. 219, 220, 284, 407, II. 21, 387, 389, 561, III. 89, 177, 264, 654, 659; result of mixing with other insecticides, III. 734.
Zinc Chloride, against Termites, III. 379.
Zinc Oxide, against *Eriosoma lanigerum*, I. 274, 433, II. 293; instead of lime, against locusts, I. 543, III. 603.
Zinc Sulphate, effect of addition of, to lime-sulphur, I. 456.
Zinckenia (*Hymenia*) *fascialis*, on cotton in Africa, II. 1; on maize in Far East, II. 489, 490; in Hawaii, III. 363; parasitised by *Hemiteles* in U.S.A., I. 292; distribution of, I. 343.
Zizel Mouse (see *Citellus guttatus*).
ziziphus, Parlatoria.
Zizyphus jujuba, Papilio demodocus on, in the Belgian Congo, III. 650.
Zizyphus spinachristi, Parlatoria ziziphus on, in Australia, II. 652.
Zizyphus vulgaris (Jujube), vine moths on, in France and Russia, I. 71, II. 405, III. 210.
zoë, Spilographa (*Trypeta*).
zolai, Polynema.
Zonabris (see *Mylabris*).
zonalis, Discoelius; Precis lavinia,
zonatus, Aspidiotus; Dacus; Leptoglossus.
Zonocerus elegans, on cotton and other crops in Africa, I. 11, 197, 247, II. 1, 277, 570, 575, 579, III. 649; in Madagascar, II. 575.
Zonocerus variegatus, on cotton and other crops in Africa, II. 107, 108, 575, 592, III. 164, 166, 367, 649, 663, 752.
Zonotrichia leucophrys (White-crowned Sparrow), destroying *Macrosiphum rosae* in U.S.A., II. 527.
Zoological Collections, pests of, and their control in Russia, III. 533.
Zophodia cactorum (see *Cactoblastis*).
Zophodia (*Phycis*) *convolutella*, bionomics of, on currant and gooseberry in Russia, II. 369, 480, III. 108, 199.
Zophodia dilatifasciella, predaceous on *Dactylopius confusus* in Mexico, I. 81.
Zophodia grossulariae, in Pennsylvania, I. 276.
Zophosis, on cotton and tobacco in Nyasaland, II. 277; on tobacco in S. Rhodesia, I. 289.
Zorontogramma distinctum, g. et sp. n., in Africa, III. 433.
zwickii, Anisoplia.
Zygaena, II. 474.
Zygaena filipendulae, parasitised by *Tachina larvarum* in U.S.A., I. 547.
Zygaena scabiosae, in Russia, III. 400.
Zygobothria nidicola, parasite of *Euproctis chrysorrhoea* in France and U.S.A., I. 270, II. 394.
Zygothrips bicolor, sp. n., food-plants of, in Florida and Louisiana, III. 631.
Zygothrips pullus, sp. n., food-plants of, in Florida and Louisana, III. 631.
Zysia pangens, insects intercepted on, from Japan, III. 420.

CASE 409
SHELF C
No. 4